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## BALL SWEET SIXTEEN FOR '59

BANNER POSTERS: Colorful and informative, sure to attract attention. They will serve as a planning guide for your customers and increase sales of these varieties.

SWEET SIXTEEN BOOKLET: Entitled "Annuals the Heart of ] Your Garden". This 6 page, full color booklet will provide advance information on the Sweet Sixteen varieties. See page 2 for prices.

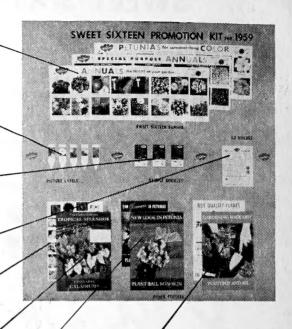
SWEET SIXTEEN PICTURE LABELS: These labels, made of durable plastic with colorful illustrations, will do the job of answering many questions for you. A point of sale "clincher."

**AD BUILDER:** To help you prepare attractive ads for your local newspaper. Includes pictures of popular bedding plant varieties.

Garden Mums-Illustrate the beautiful shades of Garden Mums with our colorful poster.

Caladiums—Turn garden shade into tropical splendor with a bedding plant which is really different and striking. This poster will help you to sell Caladiums, whether dry bulbs, started plants for bedding (see page 92), or regular pot Caladiums.

Special Petunia Posters—The fidelity and beauty of these Swiss printed posters seem to bring Pink Magic and Chiffon Petunias to life.



#### **Bedding Plant Containers**

Market-Paks provide packaged flowers and vegetables for your customer's shopping convenience. With Jiffy-Pots your customers will have blooms, or vegetables ripe weeks before their neighbors.

SEE PAGE 2 FOR DETAILS ON BALL'S REVOLUTIONARY NEW ALL PLASTIC LABELS AND BOOKLET "ANNUALS THE HEART OF YOUR GARDEN!"



#### **SWEET SIXTEEN SELECTIONS FOR 1959**

Here are the selected varieties that will appear throughout the promotion on posters, etc. The Sweet Sixteen symbol appears with each of these varieties as listed in the catalog.

To take full advantage of these sales producing posters and sales aids, we suggest that you include in your annual flower seed order some seed of all of the varieties which will be pictured in full color on the posters. See below, right, for seed collections.

#### PETUNIAS FOR SUMMER-LONG COLOR

Ball All-Double Mixture Chiffon Linda Pink Velvet Ballerina Comanche Matador Tango Bingo Crusader Maytime White Magic Blue Ribbon Glitters Pink Magic White Velvet

#### ANNUALS—THE HEART OF YOUR GARDEN

Ageratum, Blue Mink Balsam, Dbl. Bush Flwg. Mix. Carnation, Chabaud's Mix. Celosia, Forest Fire Celosia, Toreador Cleome, Pink Queen

Dahlia, Unwin's Dwarf Mix. Marigold, Color Magic Marigold, Spry Pansy, Ball Giant Mix. Phlox, Twinkle Salvia, America

Salvia, St. John's Fire Verbena, Ideal Mix. Zinnia, Cactus Mix. Zinnia, Lilliput Mix.

#### SPECIAL PURPOSE ANNUALS

#### For Cutting

Aster, Ball Mix. Marigold, Crackerjack Salvia, Royal Blue Snapdragon, Hit Parade Mix. Zinnia, Dahlia-Flowered Mix. Zinnia, Merry-Go-Round

#### For Shade

Begonia, Organdy Mix. Coleus, Ball Rainbow Mix. Impatiens, Dwarf Mix. Lobelia, Crystal Palace

#### For Low Border

Alyssum, Carpet of Snow Alyssum, Royal Carpet Marigold, Petite Mix. Nierembergia, Purple Robe Phlox, Globe Portulaca, Dbl. Mix. (Moss Rose)

#### COLLECTION A SWEET SIXTEEN PETUNIAS

Tr. pkt. each of Sweet Sixteen Petunias (catalog price \$37.00), Collection price, \$33.30.

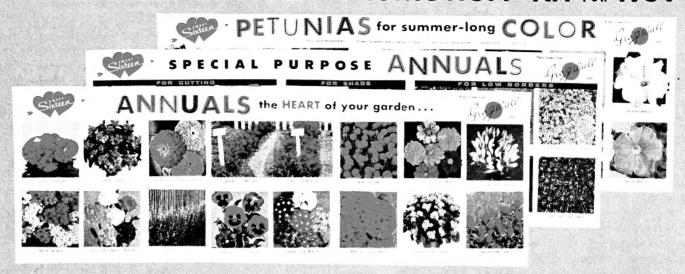
#### COLLECTION B-ANNUALS The Heart of Your Garden

Tr. pkt. each of Sweet Sixteen "Heart of Your Garden" Annuals (catalog price \$8.75), Collection price, \$7.80.

#### COLLECTION C SPECIAL PURPOSE ANNUALS

Tr. pkt. each of Sweet Sixteen Special Purpose Annuals. (Catalog price \$12.75), Collection price, \$11.40.

### SWEET SIXTEEN PROMOTION KIT FOR 1959



SWEET SIXTEEN BANNER

#### AD BUILDER





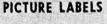








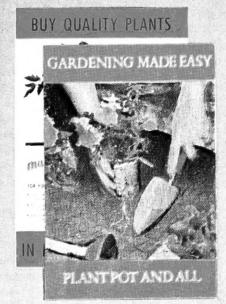




SAMPLE BOOKLET







OTHER POSTERS

#### BALL SWEET SIXTEEN SALES KIT

ARE YOU GETTING THE MAXIMUM BENEFIT FROM YOUR SEED SUPPLIER'S ATTEMPT TO HELP YOU SELL? USE SWEET SIXTEEN VARIETIES AND SALES PROMOTION MATERIAL.

### "SWEET 16" PICTURE LABELS

Made of Pure White Plastic!



At Last We've Got It! A durable fade-resistant and informative combination flat label-sales card for bedding plant growers.

We've been searching for 4 years to develop a combination of material and printing to yield a practical, inexpensive label which would sell and describe plants as well as just name them. Give your customers advance information of "Sweet 16" varieties in the "Sweet 16" Booklet; brighten up your sales area with "Sweet 16" Banner Posters; THEN clinch the sale with "Sweet 16" Picture Labels in each pak or pot.

You will find these labels will do the job of answering many quesions for you and your sales personnel. One in each "pak" or flat will prevent plants from getting mixed as unlabeled varieties often do when customers pick and choose.

The cultural information on each label will be helpful to your customers at planting time . . . . height, spacing, sun or shade, etc.

Samples of these labels will be included in your Sweet Sixteen Sales Kit. Size:  $1\frac{9}{4} \times 6\frac{3}{4}$  inches.

#### **PRICES**

#### Sets

480 labels, 10 each of 48 var. \$ 9.00 2400 labels, 50 each of 48 var. 36.00

#### Individual Varieties

Available in units of 50 of any one variety. Minimum order 500.

													Per 100				
50-	950		la	b	e	ls											\$1.70
1000-	4950																1.60
5000	up																1.50



#### "SWEET 16" BOOKLET

#### For Stuffers-Separate Mailings-Handouts!



Provide your customers with advance information on the "Sweet 16" varieties for this spring. This 6 page, full color booklet will contain illustrations of the Sweetest of the Sweet Sixteen plus a complete listing of all the other "Sweet 16" varieties.

Your customers will enjoy browsing through this booklet to pick up ideas and make plans for their spring gardening.

The booklet is ideally suited for mailing and space has been provided for your firm name imprint on the back cover.

Be sure to keep plenty on hand for garden club meetings or to hand out at your place of business,

#### **PRICES**

100 to 900 **\$1.25** per 100; 1000 or more, **\$10.00** per 1000. Net prepaid. Slightly higher in Canada.

#### SWEET SIXTEEN WOOD POT LABELS

Neat and easily read water-fast inks that will not smear



Available in all 48 Sweet Sixteen varieties plus the following:

PETUNIA: Admiral, Apache, Aztec, Bedding Mixture, Blue Lustre, Blue Mantle, California Giant Mixture, Celestial Rose, Fire Dance, Paleface, Prima Donna, Popcorn, Red Satin, Silver Medal.

AGERATUM: Blue Bedder. GOMPHRENA: Dot 'n Dash. MARIGOLD: Cupid. PANSY: Swiss Giant, Roggli. SNAPDRAGON: Tetra Mixture. SALVIA: Blaze of Fire.

VINCA: Coquette.

4 x ½ in. Pkg. of 100 of any one variety, **70c**, net prepaid. Pkg. of 1000 of any one variety, **\$6.00**, net prepaid. Minimum order 100 of one variety. For unprinted wood pot labels see page 106.

#### WITH BALL IN CALIFORNIA

Forty years ago the founder of this business, Geo. J. Ball, recognized the necessity of a well rounded plant breeding program if he was to give his fellow grower-customers the service he felt they had a right to expect. For 35 of those 40 years this work was carried on exclusively in northern Illinois. In 1953, without lessening the work being done in West Chicago, our plant breeding operations were extended to include acreage in southern California.

This winter as we start our sixth year of plant breeding and

seed producing operations in California's rich Santa Clara Valley, we thought you might like to see where we've come, hence the illustrations on this page. If you happen to be in southern California at any time, why not stop by and pay us a visit—Superintendent Bill Marchant will help to make you feel at home. We're located a mile or so east of Santa Paula on California state highway No. 126. This highway leaves U. S. 101 about  $2\frac{1}{2}$  miles southeast of the city of Ventura. Distance from U.S. 101, about 15 miles.

Thousands of Petunia seedlings from which the following summer's seed crop will be grown fill the greenhouses during the late winter months. Note the ventilating fans on the far ends of the houses.

All parent plants used for Hybrid Petunia seed production are grown in individual pots. This permits better control of soil borne diseases and enables the pollinators to handle plants more efficiently. Bill Marchant (left) manager of our Plant Breeding Station near Santa Paula, with his crew. This is our sixth year in Santa Paula, where Bill supervises plant breeding and trial work, together with a limited amount of seed production for resale.







### Our 1959 Catalog...

For your convenience, we have combined all our products with the exception of Chrysanthemum Cuttings in one book. You will find a complete index on the inside back cover. A partial index follows:

**Plant Containers** and Supplies . . . . . . . . . . . . . . . . . . 98

### FLOWER SEEDS

Annuals and perennials are combined in alphabetical order (with a few exceptions). In each case the annuals appear first, followed by the perennials. Perennials may be identified readily by **PERENNIAL** at the beginning of each perennial list.

After each heading, you will find a general information line; for instance:

ANNUAL (A. mexicanum) 200,000 S. 3 weeks 65-75° A. mexicanum—refers to genus and species as described according to the best available botanical reference.

200,000 S.—means 200,000 seeds per ounce.

2-3 weeks-indicates usual time required for germination.

65-75°—means normal night temperature range for best germination. In cases where the number of seeds per ounce varies by variety, you will find "S. See below" in the space normally occupied by the number of seeds, and that figure will be given for each variety listed. These figures must NOT be accepted as indicating the number of plants to be expected. Under favorable germinating conditions most large seeds will germinate 60% to 70%. In figuring your seed requirements, keep in mind that it is also good practice to select only the most vigorous seedlings, except in the case of mixtures, when seedlings should be transplanted "as they come."

New varieties will be indicated by a solid vertical rule at the left of the variety description such as that at left of this paragraph.

#### ACHILLEA

S. See below 1-2 weeks 65-75° PERENNIAL (A. species)

• Filipendula, Parker's Variety (Cloth of Gold). 225,000 S. Large heads of golden yellow flowers on long stems; fine for cutting.

• The Pearl (Ptarmica), 170,000 S. 2½ ft. The standard double white

Prices above 2, each: tr. pkt., 30c; ½ oz., 70c; ¼ oz., \$1.25.

#### ACHIMENES

ANNUAL (A. species)

2,000,000 S. 2-3 weeks 65-75°

Mixture. Brilliantly colored, trumpet-like flowers in velvety tones of red, violet and white. Makes a nice spring and summer pot plant. Culture same as Gloxinias. Tr. pkt., \$1.50.

#### **ACONITUM** (Monkshood)

PERENNIAL (A. Napellus)

10.000 S.

Must be exposed to freezing temperature for normal germination.

Napellus. 4 ft. Dark blue; does best in partial shade. Tr. pkt., 40c; 1/4 oz., \$1.20; 1 oz., \$3.60.

#### ACROCLINIUM

ANNUAL (Helipterum roseum)

8,500 S. 2-3 weeks 65-75°

Sensation Giants. An extra large semi-double strain of brightly colored Strawflowers for cutting. Shades of rose, pink and white. Tr. pkt., 25c; ¼ oz., 60c; 1 oz., \$1.80.

#### **AGATHAEA**

ANNUAL (Felicia amelloides)

Must be exposed to freezing temperature for normal germination. Coelestis (Blue Daisy). 2 ft. Fairly tall and useful for cutting. Ťr. pkt., 30c; ¼ oz., 90c; Ĭ oz.,

#### **AGERATUM**

See page 8.

#### ALOE

ANNUAL (A. species)

S. See below 3-4 weeks 65-75° Variegata (Tiger Aloe). 6,500 S. 2-inch pot plants of this attractive green and yellow foliage plant can be produced in less than a year. A valuable item for florists. 100 seeds, \$1.65; 500 seeds, \$7.00; 1000 seeds, \$12.00.



ALOE VARIEGATA

#### **ALSTROEMERIA** (Lily-of-Peru)

PERENNIAL (A. chilensis)

55° 1600 S. 6-8 weeks

Chilensis. Shades of pink, rose and red. Medium tall. For bedding and cut-flower use. Germination erratic.

Tr. pkt., 55c; 1/4 oz., \$1.65; 1 oz., \$5.00.

#### **ALYSSUM**

See page 8.

#### **AMARANTHUS**

ANNUAL (A. tricolor)

S. See below 2-3 weeks 65-75° When planted outdoors, all Amaranthus prefer dry, sunny locations.

Water very sparingly, if at all, after plants are established.

Molten Fire. 28,000 S. 4 ft. Attractively variegated deep red foliage. Tr. pkt., 25c; ¼ oz., 70c; 1 oz., \$2.10.

Tricolor Splendens (Joseph's Coat), 60,000 S. 3 ft. Beautiful foliage. Green, red and yellow Tr. pkt., 25c; ¼ oz., 60c; 1 oz., \$1.80.

#### **ANCHUSA**

PERENNIAL (A. species)

S. See below 3-4 weeks 65-75°

Seed should be refrigerated for 72 hours before sowing.

Dropmore Strain (Italica), 1100 S. 5 ft. Nice blue for cutting. Tr. pkt., 20c;  $\frac{1}{4}$  oz., 60c; 1 oz., \$1.80.

Myosotidiflora. 10,500 S. 12 in. May flowering, forget-me-not-blue. Tr. pkt., 45c; ½ oz., \$1.35; ½ oz., \$2.50; 1 oz., \$7.50.

#### ANEMONE

PERENNIAL (A. species)

37,000 S. 5-6 weeks 65-75°

Pulsatilla (European Pasque Flower). 12 in. Beautiful violet-purple flowers on plants which are covered with silky hairs. Blooms in April-May; likes a dry location. Tr. pkt., 50c; 1/4 oz., \$1.50; 1 oz., \$4.50.

St. Brigid Mixture. Choice long-stemmed mixture of brilliant colors. Tr. pkt., 55c; ¼ oz., \$1.10; 1 oz., \$3.25.

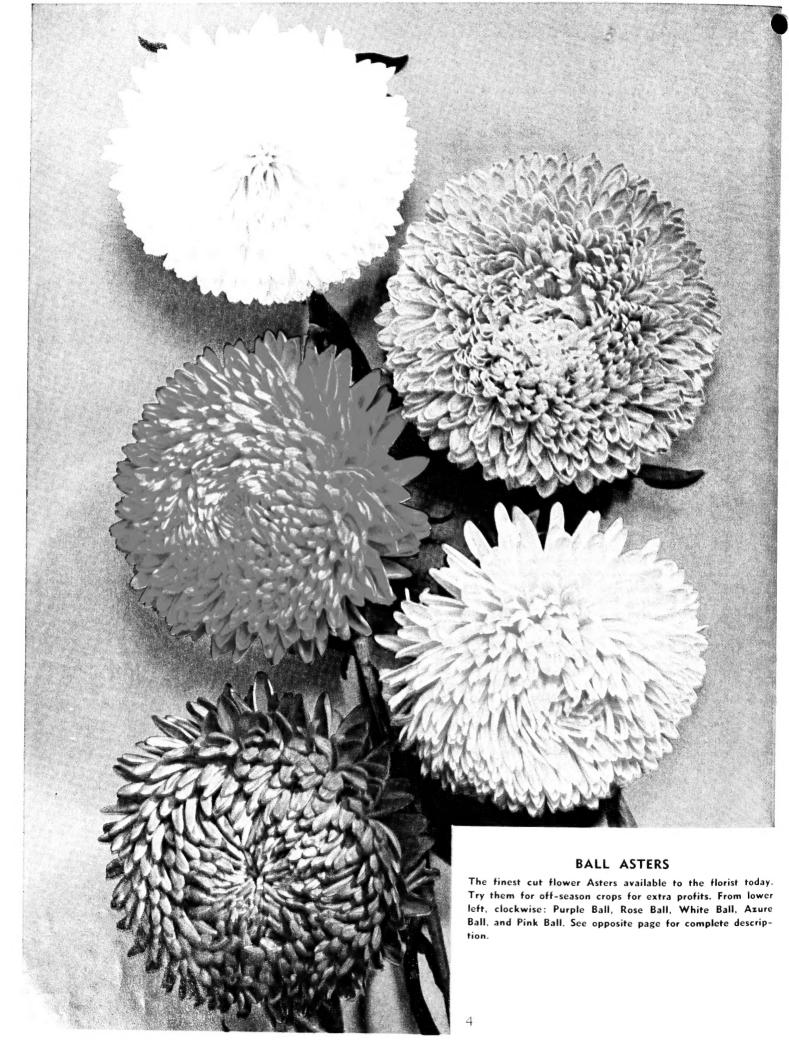
#### ANTHEMIS

PERENNIAL (A. Kelwayi)

85,000 S. 3-4 weeks 65-75°

Kelwayi (Hardy Marguerite). 3 ft. Yellow Daisy flowers produced throughout the summer. 1/4 oz., 35c; 1 oz., \$1.10.

#### AQUILEGIA (Columbine)



### Ball Asters

erog Ball

(WILT RESISTANT-12,000 S.)

#### SEE CULTURAL INSTRUCTIONS ON PAGE 7

ANNUAL (Callistephus chinensis)

12,000 S. 2-3 weeks 65-75°

Growing good quality Asters from February to November in northern greenhouses, and throughout the winter in southern areas, both under glass and in the open, is a regular practice with an increasing number of growers each year. Asters require only additional lights, steam sterilized soil, and 55 to 60° temperature in winter to grow them to perfection-and they'll hold up in the display case or home nearly as long as Mums, an important point.

One thing is essential, though; a strain bred especially for florists' use. The Ball Aster fills this requirement perfectly.

All the following varieties are Ball Originator Seed.

- White Ball. Large flowers (31/2 to 4 in.), exceptional doubleness, and fine, stiff stems. Blooms normally August 25.
- Rose Ball. Rich, deep rose with fully double (3½ to 4 in.), incurved flowers. Blooms normally August 25.
- Purple Ball. Large incurved flowers of bright purple. Blooms normally
- Pink Ball. Large (3½ to 4 in.), fully double shell-pink flowers. Blooms normally August 20.
- Azure Ball. Fully double (3 to 3½ in.) flowers of clear light blue. Blooms normally August 20.
- Phlox Ball. Fully double, medium large flowers of soft peach-blossompink, Blooms normally September 1,

Prices above 6, each: tr. pkt., \$1.75; 1/4 oz., \$3.20; 1 oz., \$9.60.

**COLLECTION:** 1 tr. pkt, each of above named varieties: 6 pkts., \$9.50.



#### • BALL FLORIST MIXTURE =

A formula blend of all the foregoing extra double Ball type Asters. Excellent for bedding or cutting. Tr. pkt., \$1.75; ½ oz., \$3.20; 1 oz., \$9.60.

• Early Pink Ball. 31/2-inch flowers, similar to Pink Ball but a week earlier. Blooms normally August 12. Tr. pkt., \$1.75; ¼ oz., \$3.20; 1 oz., \$9.60.

Earliana Rose (New-A Ball Origination), Blooms normally in early August along with the Queen of the Market class, but is far superior in flower size, stem length and doubleness. A mid-March sowing, benched 6 x 6 inches, and lighted until May I will be ready to cut by mid-June. Good quality Asters in just 90 days from seeding. Tr. pkt., \$1.75; ¼ oz., \$5.00; 1 oz., \$15.00.

Earliana White (New-A Ball Origination). Identical to Earliana Rose except for its fully double, pure white flowers. Excellent for June cut flower work. Tr. pkt., \$1.75; ½ oz., \$5.00; 1 oz., \$15.00.



To maintain the full doubleness and high quality of these varieties calls for annual production of specially selected planting stock. Without this constant yearly program, these strains will rapidly revert to the old open-centered types. That's why it's important to buy originator's seed, identified by the symbol at left. All

other is at least 2 generations removed from the originator's controlled line-breeding.

NOTE: Because of their extreme doubleness the true origina-tor's strains of these Asters are shy seeders and are some-times in short supply. Order early and be sure of your supply.

### DWARF **ASTERS**

#### For Pot Plants

The popularity of pot plant Asters has increased substantially during the past year. Some growers have reported prices rivaling those of pot Mums for well grown plants. In addition to their lasting qualities—often as long as three weeks in the average home-they offer a variety of colors which can't be had in pot Mums. Bright, true rose-pinks, lavenders and purples are available in addition to pure white and red shades. We've been working with pot Asters for four years now, both selecting better strains and growing them at different seasons. Briefly our recommendations at this time are:

- 1. Grow at 55° during the months of October through April.
- 2. Light (same set-up as Mums) up to time terminal bud is the size of a nickel. Only exception is the period from May 1 to September 1. Plants may be shaded from "lights off" date until full bloom in order to bring laterals into flower near same time as terminal.
- 3. Grow in 21/4-inch Jiffy-Pots and shift especially if panning up 2 or more plants per pot. Permits selecting plants of uniform size. Use sterilized soil only.
- 4. Best varieties:
  - a. Kirkwells, 4 to  $4\frac{1}{2}$  months seed to flower. Best flowered December through February only.

DWARF ALL SAINTS (New) Dark Blue Light Blue Scarlet Rose White Mixture Salmon-Pink Prices above 7. each: tr. pkt., 85c; 1/4 oz., \$2.50; 1 oz., \$7.50.



ALL SAINTS ASTERS

Newest of the new in pot Asters. Note the compact, shapely habit of Scarlet, Salmon-Pink and Dark Blue, pictured above. The other colors are equally attractive.

- b. Dwarf Queens, 4 to 4½ months seed to flower. Best flowered February through April.
- c. Dwarf All Saints, 5 to 51/2 months seed to flower. Best flowered March through October. This is the best type for combination use.
- 5. Sales are exceptionally good at Easter and Mother's Day.
- 6. Make unusually nice plants singly in 3- or 4-inch pots or panned in 5's and 6's.

#### DWARF QUEENS

Deep Blue Pink Rose Deep Scarlet Light Blue White Mixture Prices above 7, each: tr. pkt., 50c; 1/4 oz., \$1.50; 1 oz., \$4.50.



### Wilt-Resistant Asters—Continued



Some nice looking pot Asters grown by Pud Averill, Snohomish, Washington (Pud in photo). Seed was sown thinly right after Decoration Day, graded seedlings potted 5 per 6-inch pot, photo made September 19. Pud was quite enthused about the plants, realized \$1.25 wholesale, \$3.00 retail. Only problem—some unevenness in blooming date. He hopes to improve this another year by Jiffy-Potting the seedlings (21/4-in.) and panning 21/4's instead of seedlings. Variety used, Kirkwells.

#### OTHER POT ASTERS

• Gerhart Hauptmann. Bushy, compact plants heavily covered with 2-inch, ball-like, double flowers of rich, cinnabar-red. Tr. pkt., 50c; ¼ oz., \$1.50; 1 oz., \$4.50.

#### **KIRKWELL**

Light Pink Deep Rose Crimson Dark Blue Mixture

**Prices** above 5 varieties, each: Tr. pkt., **75c**; ½ oz., **\$2.00**; 1 oz., **\$6.00**.

#### THE ROYALS

Bloom normally just ahead of the American Branching class.

- Azure-Blue. A fine commercial cut-flower variety.
- Ball Deep Rose. Long-stemmed, bright deep rose.
- Ball Deep Purple. A rich, deep color; long stems.
- Ball White Early. A good resistant white.
   Shell-Pink. A clear shade of pastel pink.
   Royal Mixture.

**Prices** above 6, each: tr. pkt., **35c**; ½ oz., **65c**; 1 oz., **\$2.00**; 4 ozs., **\$7.00**.

#### QUEEN of the MARKET

Early August-flowering class; rather shortstemmed. Partly resistant. We much prefer the new fully double Ball Strains which can be flowered at this season by additional early lighting. See page 7 for lighting schedules.

Azure-Blue. A clear, light lavender-blue.

Deep Rose. Same color as Ball Deep Rose.

Flesh-Pink, Shell-pink; deepening as it matures,

White. The earliest cut-flower white.

Queen of the Market Mixture.

**Prices** above 5, each: tr. pkt., 35c;  $\frac{1}{4}$  oz., 65c; 1 oz., \$2.00; 4 ozs., \$7.00.

#### AMERICAN BRANCHING

(Early Beauty)

The standard long-stemmed, midseason class, flowering normally in late August.

**Heart of France.** Distinctive scarlet-crimson color.

Tr. pkt., 40c;  $\frac{1}{4}$  oz., \$1.25; 1 oz., \$3.75; 4 ozs., \$12.50.

- Early Beauty Silvery Rose. Fine light rose. Tr. pkt., 40c; ½ oz., \$1.25; 1 oz., \$3.75; 4 ozs., \$12.50.
- Azure-Blue. An excellent, clear light blue.
- Ball White Late. Popular midseason white.
   Deep Rose. Long stems and large flowers.
   Purple. Rich violet-purple. Long-stemmed.
   Semple Pink. Standard shell-pink variety.
   Sensation. Deep crimson. A favorite in the

American Branching Mixture.

Prices above 7, each: tr. pkt., 35c;  $\frac{1}{4}$  oz., 65c; 1 oz., \$2.00; 4 ozs., \$7.00.

#### YELLOW DUCHESS =

South.

(New). Described by the originator as a pure yellow with large incurved flowers. We have not trialed this variety. Tr. pkt., \$1.00; ¼ oz., \$3.00; 1 oz., \$9.00.

#### **PRINCESS**

These types have crested or cushioned Anemone centers, forming fairly hard, mediam sized flowers. Normal blooming, late August.

Alice. Clear azure-blue.

- Anne. Light peach-blossompink.
- Elizabeth. Fine pure white.

Goldilocks. Creamy yellow.

- Margaret. Long-stemmed, deep rose.
- Victoria. Bright scarlet; the reddest of all Asters.

Princess Mixture. Formula blend of the above varieties.

PRINCESS ASTER

Prices above 7, each: tr. pkt., 40c; ½ oz., 90c; 1 oz., \$3.00; 4 ozs., \$10.00.

#### KING or NEEDLE

(Non-Resistant)

Attractively quilled petals give these flowers hardness and durability for shipping. Blooms normally late August.

Lavender. Good commercial color.

Rose. A fine, deep rose-pink.

Salmon. An unusual shade.

Shell-Pink, Soft satiny pink.

Violet. A rich and striking color.

White. Popular market strain.

King Mixture.

Prices above 7, each: tr. pkt., 50c; ¼ oz., \$1.00; 1 oz., \$3.00; 4 ozs., \$10.00.

#### SHAGGY TYPES

This includes the Early California Giants and the Cregos. Both have interlaced petals producing a fluffy effect. Blooming dates indicated are for normal season.

California Giant Dark Purple. Highly resistant, rich purple. Sept. 25.

 Early Giant Light Blue. Extra large shaggy flowers of clear, light blue. Aug. 20.

Early Giant Peach Blossom. Pleasing light pink. Aug. 20.

• Early Giant Rose Marie. An excellent large flowered, bright deep rose. Aug. 20.

Early Giant White. Fluffy, pure white flowers. Aug. 20.

Early Giants Mixture.

Prices above 6, each: tr. pkt., 40c;  $\frac{1}{4}$  oz., \$1.25; 1 oz., \$3.75; 4 ozs., \$12.50.

Crego Azure-Blue. Fine light blue. Sept. 10.

Crego Deep Rose. Large-flowered. Sept. 10.

**Crego Orchid.** Attractive orchid-lavender. Sept. 10.

Crego Purple. A rich, bright color. Sept. 10.

Crego Shell-Pink, Light clear pink, Sept. 10.

Crego White. Excellent pure white. Sept. 10.

Crego Mixture.

Prices above 7, each: tr. pkt., 35c;  $\frac{1}{4}$  oz., 65c; 1 oz., \$2.00; 4 ozs., \$7.00.

#### BOUQUET

A class of upright branching wilt-resistant Asters developed for the cut-flower market. 24-inch plants carry 3-3½-inch, fully double flowers at the top, to be cut as one bunch. Blooms normally, mid-August.

White Scarlet Rose Azure-Blue Crimson Rose-Pink

 Powderpuff Mixture. A showy blend of the above and other colors in this class.

Prices above 7, each: tr. pkt., 50c; ¼ oz., \$1.50; 1 oz., \$4.50.

New varieties are indicated by a solid vertical rule at the left of the variety description such at that at left of this paragraph.

BOUQUET TYPE ASTERS







Picture at left shows Vic Ball and Phil Jones looking over the Aster flowering trials at West Chicago. Extensive trials such as this are flowered in our greenhouse each year to insure that the seed you buy is true to type and of the top quality for which Geo. J. Ball, Inc. is justly famous.

### Making Ball Asters Pay!

#### **OUTDOOR CULTURE**

"Resistance" to Aster wilt does not mean complete "immunity"! Even the most resistant strains may eventually wilt in thoroughly infested soil, although they are far more satisfactory than non-resistant strains. Our past experience indicates that changing the location of the Aster planting regularly, or steam sterilizing, is a worth-while safety precaution. We sow them 6 weeks before planting-out date. Three weeks after sowing, the seedlings go into Jiffy-Pots or plant bands; three weeks later they're ready for planting out or benching. We space them a foot apart each way in beds so that conventional wire and string may be used for supports. We find cloth house protection a necessity to prevent leaf hoppers from spreading yellows, and to keep plants from becoming too hard.

#### OFF-SEASON ASTERS (UNDER GLASS)

Many growers have written us to say that their spring greenhouse Aster crops were the best paying crops that they had on their place. While Asters can be flowered any month of the year, the spring and early summer months seem to be the most profitable. The only important requirements are: 55° night temperatures, and additional lighting, which must be supplied continuously from the seedling stage until plants are 20 to 24 inches tall. The only exception is the period from May 1 to September 1, during which day length is long enough. 60 watt bulbs with reflectors, spaced 5 feet apart, or the lighting set-up you use for Mums is satisfactory. Light must be turned on from sundown to 10:00 P. M. daily, or for two hours in the middle of the night.

Spacing is usually 8x8 inches. White Ball, Pink Ball and Rose Ball are especially desirable for off-season culture. Azure Ball, and Purple Ball do equally well, but these colors will be wanted in lesser quantity. Use sterilized soil for best results.

The following schedule works out satisfactorily in most areas, although there is more variation from year to year than with Mums.

OPERATION	PERATION TIME OF YEAR														
Sow seed	July 15	Aug. 15	Sept. 10	Oct. 20	Dec. 20	Feb. 1	Mar. 15	Apr. 20	May 20	June 10	June 20	July 10			
Band seedlings	Aug. 10	Sept. 10	Oct. 1	Nov. 15	Jan. 10	Feb. 20	Apr. 1	May 10	June 10	July 1	July 15	Aug. 1			
Bench plants	Sept. 15	Nov. 1	Dec. 1	Jan. 1	Mar. 1	Apr. 1	May 15	June 15	July 15	Aug. 1	Aug. 20	Sept. 1			
Approx. flwg. date	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.			

### Wilt-Resistant Asters—Continued

#### SINGLE ASTERS

Single Base-Branching Mixture. Upright, base-branching plants. Tr. pkt., 30c; ¼ oz., 45c; 1 oz., \$1.50; 4 ozs., \$5.00.

Single Rainbow Mixture. (Special Florist's Strain). An attractive mixture of medium sized, single blooms.

Tr. pkt., 30c; 1/4 oz., 45c; 1 oz., \$1.50; 4 ozs., \$5.00.

#### MISCELLANEOUS MIXTURES

• All Purpose Mixture. A formula blend of the leading, all double cut flower varieties and types for those who want the most in colors and blooms over a long period.

Tr. pkt., 35c; 1/4 oz., 65c; 1 oz., \$2.00; 4 ozs., \$7.00.

• Burpeeana (Non-Resistant). Extra early bedding type mixture which flowers normally in late July. Large, fluffy, Crego type flowers on 18-inch stems. Base branching, Originator's seed. Tr. pkt., \$1.00; ¼ oz., \$3.00; 1 oz., \$9.00.

California Super Giant Mixture (Non-Resistant). Choice blend of large, fully double "shaggy-petaled" flowers. Long-stemmed. Late Sept. Tr. pkt., 50c; ¼ oz., \$1.00; 1 oz., \$3.25.

Giant California Sunshine Mixture. (Non-Resistant). An attractive mixture of large flowered Anemone type blooms with small center cushions and long ray petals.

Tr. pkt., 35c; ¼ oz., \$1.00; 1 oz., \$3.00.

Imbricated Pompon Mixture (Non-Resistant). Small, rounded flowers produced on upright growing, compact plants about 15 inches tall. Good for pot plants. Tr. pkt., 45c; ¼ oz., \$1.30; 1 oz., \$3.90.

Remo Mixture (Non-Resistant). Two-inch flowers with yellow centers are freely produced on upright, branching plants 12-16 inches tall. Suitable for table pot plants or cutting (cut entire plant). Tr. pkt., 45c; ¼ oz., \$1.25; 1 oz., \$3.75.

#### PERENNIAL ASTER

**PERENNIAL** (A. species) 19,000 S. 2-3 weeks 70-80°

Alpinus, Finest Mixture. 15 in. 11/2 in. lavender, blue and white flowers. Tr. pkt., 55c; 1/8 oz., \$1.10.

Hardy Large-Flowered Mixture. 4 ft. Fall flowering. A perfectly hardy and attractive assortment. Tr. pkt., 55c; 1/8 oz., \$1.25; 1/4 oz., \$2.25.

• Wartburg Star (Subcoeruleus). Clear lavender-blue flower with yellow center. For border or cut flowers. Tr. pkt., 75c; ½ oz., \$2.00; ½ oz., \$6.00.



AGERATUM, BLUE MINK

Large powder-blue flowers on early blooming, shapely plants. Fine for combinations and borders.

#### **AGERATUM**

#### ANNUAL

(A. mexicanum) 200,000 S. 3 weeks 65-75° Most seed-produced strains vary somewhat in habit but make satisfactory material for flat sales. Requires 60° for best growth.

- Blue Bedder. 12 in. Fairly uniform in growth and color with medium large, freely produced, bright blue flowers. Tr. pkt., 40c; ½ oz., 90c; ¼ oz., \$1.60; 1 oz., \$5.00.
- Blue Cap. 10 in. Small, bright orchid-blue flowers freely produced on bushy plants. The most dwarf blue Ageratum. Tr. pkt., 40c; ¼ oz., \$1.20; 1 oz., \$3.60.



#### BLUE MINK =

12 in. Tetraploid. Large, powder-blue flowers are liberally

borne on shapely plants. Pictured above. Early blooming and much more uniform than other

varieties from seed. Tr. pkt., **60c**; ½ oz., **\$1.65**; ¼ oz., \$3.00; 1 oz., \$9.00.

#### ALYSSUM

ANNUAL (Lobularia maritima)

90,000 S. 2 weeks 65-75°

All are delightfully fragrant and do well even in poor soils. Valuable for combinations. or bedding and edging.



#### ● CARPET OF SNOW

(Snowcloth). Produces a very dense, flat mass of white flowers, 3 to 4 inches high by 8 to 10 inches across. Tr. pkt., 20c; ¼ oz., 35c; 1 oz., \$1.00; 4 ozs., \$3.35.

Little Gem. 5 in. Dense, rounded heads of white flowers; does not spread. Tr. pkt., 20c; ¼ oz., 35c; 1 oz., \$1.00; 4 ozs., \$3.00.

Pink Heather ALL-AMERICA & SELECTION (New-All-America Winner for 1959). 6 in. A dwarf. compact, Gem type Alyssum well covered with lavender-pink flowers. Interesting and unusual. Pictured below.

Tr. pkt., 75c; ½ oz., \$1.25; ¼ oz., \$2.35; 1 oz., \$7.00.



#### ● ROYAL CARPET\*

ALL-AMERICA A SELECTION 118,000 S. Violet-purple flowers are freely produced on plants about four inches high and ten inches across. Makes a nice border plant. Pictured below, left, Tr. pkt., 40c; ¼ oz., \$1.30; 1 oz., \$3.90; 4 ozs., \$13.00.

Snowdrift (Maritimum tetraploid). 12 in. Large, snowy white blooms on uniform plants. Satisfactory for cutting. Tr. pkt., 30c; ¼ oz., 90c; 1 oz., \$2.70.

Violet King. 4 in. Dwarf plants, deeper in color and more compact than Violet Queen. Tr. pkt., 45c; 1/4 oz., \$1.50; 1 oz., \$4.50; 4 ozs., \$15.00.

Violet Queen. 5 in. Violet flowers borne on dwarf plants.

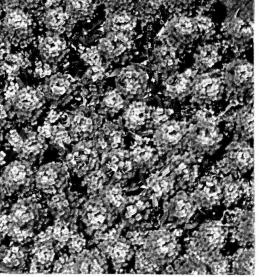
Tr. pkt., 25c; ¼ oz., 60c; 1 oz., \$1.80; 4 ozs., \$6.00.



**PERENNIAL** (A. saxatile) 30,000 S. 3-4 weeks 65-75° The two varieties following are perfectly hardy with us and make fine, free flowering rock garden or border plants.

• Saxatile Compactum (Gold Dust), 12 in. Flowers early May. Rich golden yellow. Tr. pkt., 20c; ¼ oz., 40c; 1 oz., \$1.20. Saxatile Silver Queen (Sulphureum), Light lemon-vellow.

Tr. pkt., 30c; ¼ oz., \$1.00; 1 oz., \$3.00.



ALYSSUM, ROYAL CARPET

An All-America Selection. Violet-purple flowers, freely produced on low-growing plants. A fine border plant.

BE SURE TO INCLUDE ALL OF THE SWEET SIXTEEN VARIETIES ON YOUR SPRING SEED LIST

Fairy Pink. 12 in. Shades of lavender-pink.

Tr. pkt., 50c; 1/8 oz., \$1.00; 1/4 oz., \$1.85; 1 oz., \$6.50.

Golden Ageratum (Lonas inodora), 128,000 S. 14 in, Large clusters of Ageratum-like golden yellow flowers. Very colorful for bedding or borders

Tr. pkt., 40c; ½6 oz., 80c; ½ oz., \$1.50; ¼ oz., \$2.75.

Imperial Dwarf White. 12 to 15 in. Medium dwarf, creamy white.

Tr. pkt., 50c; 1/4 oz., \$1.25; 1 oz., \$4.00.

Midget Blue. 12 in. Medium sized, clear blue flowers are freely carried on dense, smallleaved plants. Tr. pkt., 40c; 1/8 oz., \$1.00; 1/4 oz., \$1.75; 1 oz., \$6.00.

Tall Blue. 28 in. Medium sized, light blue. Tall strain for cutting.

Tr. pkt., 30c; ¼ oz., 55c; 1 oz., \$1.65.

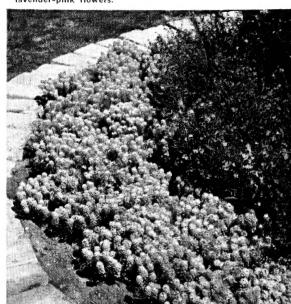
## "GROWER TALKS"

The only commercial monthly publication which is devoted exclusively to flower growing. Suggestions for items to grow, sowing dates, insect and disease controls, varieties, etc. Yours for 1 year for \$1.25; 3 years for

Binder for 24 issues of GROWER TALKS, \$1.50.

#### ALYSSUM, PINK HEATHER (Below)

1959 All-America Selection Award Winner, Pink Heather is a dwarf, compact Gem type with a lavender-pink flowers.







BALSAM DOUBLE BUSH FLOWERING MIXTURE A Sweet Sixteen

Selection for 1959 See pages 4-7.

#### **ASTERS**

Grig Ball

#### AUBRIETIA

#### PERENNIAL

(A. deltoidea graeca)

150,000 S. 2-3 weeks 65-75°

Large-Flowered Mixture (Monarch Strain). 6 in. Low growing, matlike plants; similar to Arabis but with flowers in a wide range of colors from lilac to purple.

Hendersoni. Deep purple. Leichtlini. Carmine-rose.

Prices above 3, each: tr. pkt., 45c; ¼ oz., \$1.30; 1 oz., \$3.90.

Baby's Breath. See Gypsophila, page 22. Bachelor Button. See Centaurea, page 13.

#### BALSAM

ANNUAL (Impatiens balsamina)

ns balsamina) 3300 S. 2-3 weeks 65-75°

●DOUBLE BUSH FLOWERING MIXTURE

## Sixteen

15 in. Bright, showy, double flowers resembling Camellias are prominently displayed on bushy plants with dark green foliage. Makes a striking display, and is easily grown.

Tr. pkt., 40c; 1/4 oz., 75c; 1 oz., \$2.25.

AQUILEGIA (Columbine)

Well grown Columbines are of definite cut-flower value for retail growers. For outdoor growing space plants 12 to 18 inches apart. For forcing, pot up from the field the first year plants, storing in a cold house or frame until about February 1. Start in a low temperature, gradually

Coerulea (Rocky Mountain Columbine). 18 in. Sky-blue with white corolla. Tr. pkt., 40c; ½ oz., \$1.25; 1 oz., \$3.75.

Crimson Star. 18 in. Dark red with white corolla. Tr. pkt., 60c; ½ oz., \$1.75; ¼ oz., \$3.00.

 Long-Spurred Mixture. 2 ft. A well balanced blend with large flowers with long spurs.

Tr. pkt., 40c; ½ oz., \$1.20; ½ oz., \$2.00; 1 oz., \$6.00.

#### ● McKANA'S GIANT

increasing to around 50°.

Large, extra long-spurred flowers 3 to 4 inches across in a gay mixture of colors. One of the showiest of all Columbines. Tr. pkt., \$1.00; ¼ oz., \$3.00; 1 oz., \$9.00.

Mrs. Nicholls. 2 ft. Large-flowered, clear deep blue. Tr. pkt., 50c; ½ oz., \$1.50; ½ oz., \$2.75; 1 oz., \$9.00.

Mrs. Scott Elliott's Mixture. 2 ft. An excellent long-spurred mixture. Tr. pkt., 50c;  $\frac{1}{4}$  oz., \$1.50; 1 oz., \$4.50.

Rose Queen. 18 in. Rose with white corolla. Tr. pkt., 50c; ¼ oz., \$1.50; 1 oz., \$4.50.

Snow Queen. 2 ft. Creamy white flowers. Tr. pkt., 50c; ¼ oz., \$1.50; 1 oz., \$4.50.

#### ARMERIA (Thrift)

PERENNIAL (A. species) S. See below 3-4 weeks 65-70°

**Alpina.** 32,000 S. 8 in. Dwarf, bright rose. Tr. pkt., \$1.00; ½ oz., \$3.00; ½ oz., \$9.00.

#### ●GLORY OF HOLLAND

Ball-shaped deep pink flowers about  $1\frac{1}{2}$  inches in diameter, carried on straight, wiry stems 2 feet long. Fine for cutting. Blooms throughout the summer. Tr. pkt., 70c;  $\frac{1}{2}$  oz., \$2.10;  $\frac{1}{2}$  oz., \$6.30.

#### ARABIS (Rock Cress)

PERENNIAL (A. species) 120,000 S. 3-4 weeks 65-75° Alpina Pink, 12 in. Delicate pale pink,

Tr. pkt., 45c; ¼ oz., \$1.30; 1 oz., \$3.90.

Alpina Snowcap. 6 in. Dwarf, compact plants with dense masses of shining snow-white flowers. Blooms very early in spring.
 Tr. pkt., 40c; ¼ oz., 80c; 1 oz., \$2.75.

#### **ASCLEPIAS**

PERENNIAL (A. tuberosa)

4500 S. 3-4 weeks 65-70°

**Tuberosa.** 3 ft. Showy, orange flowers. Requires well drained location. Freezing over winter helps germination. Tr. pkt., **35c**; ½ oz., \$1.30; 1 oz., \$3.90.

#### **ASPARAGUS**

ANNUAL (A. species) 750 S. 4-6 weeks 70-80° We offer specialist-grown seed which germinates around 65% to 75%.

**Prices** above 2, each: 100 seeds, **30c**; 250 seeds, **70c**; 1000 seeds, **\$2.50**; 5000 seeds, **\$10.00**.

Double Bush Flowering Balsam is also available in:

Scarlet Rose

Prices above 2, each: tr. pkt., 40c; ¼ oz., 75c; 1 oz., \$2.25.

Double Camellia-Flowered Mixture. 2 ft. Bright colors. Tr. pkt., 30c; ½ oz., 50c; 1 oz., \$1.50.

#### BAPTISIA (False Indigo)

PERENNIAL (B. australis) 1700 S. 3-4 weeks 65-75°

Australis. 3 ft. Sprays of pea-shaped, indigo-blue flowers. Tr. pkt., 40c; ¼ oz., 70c; 1 oz., \$2.10.

#### BEGONIAS

See page 10.

#### **BELLIS** (English Daisy)

#### PERENNIAL

(B. perennis var. monstrosa)

135,000 S. 1-2 weeks 65-75°

We have a fine double strain of this popular English Daisy, much used for early summer bedding and for spring combinations. Though a perennial, it is commonly grown as an annual like Pansies,

Red Rose White Salmon

Prices above 4, each: tr. pkt., 60c; 1/8 oz., \$2.00; 1/4 oz., \$3.75.

Mixture. Tr. pkt., 60c; ½ oz., \$1.80; ¼ oz., \$3.30.

#### BELLS of IRELAND

#### ANNUAL

(Molucella laevis) 42,000 S. 3-5 weeks 75-80° This subject is immensely popular with floral artists, being used in a wide variety of arrangements. Plants are base-branching with 2-ft. stems closely set with large, bell-like sheaths of translucent green. May be used in the fresh or dried state and is easily grown in greenhouse benches, in pots, or outdoors in summer. Tr. pkt., 40c; ¼ oz., \$1.00; 1 oz., \$3.00.

#### BROOM

### (Cytisus var.)

(Cytisus var.) 5500 S. 6-8 weeks 70-80° Choice Mixture. 4 to 5 ft. Vigorous, hardy shrubs producing raceme-like flowers in a range of bright colors. Flowers second season from seed. Tr. pkt., 50c; ½ oz., \$1.25; ¼ oz., \$2.35.



BELLS OF IRELAND

#### BROWALLIA

ANNUAL (B. species) S. See below 2-3 weeks 65-75° Good bedding plant for shade and semi-shade.

• Speciosa Major. 111,000 S. 1½-inch violet-blue flowers are carried on 10- to 12-inch plants. The standard variety for pots. Tr. pkt., \$1.20; ½6 oz., \$3.60; ½ oz., \$6.60; ½ oz., \$12.00.

Viscosa Compacta Sapphire. 240,000 S. Compact growth with a profusion of small attractively light-eyed blue flowers. Tr. pkt., 40c; ½6 oz., \$1.10; ½6 oz., \$2.00; ½4 oz., \$3.80.



BEGONIA, BALL RED

A true red Begonia on dwarf, well shaped plant. Free flowering.

#### **DWARF** (4 to 6 Inches)

 Adeline. Very free flowering bright pink; dwarf and compact.

Tr. pkt., \$1.50;  $\frac{1}{64}$  oz., \$3.25;  $\frac{1}{32}$  oz., \$6.00.

- Ball Deep Rose. In winter the color is a deep rosy red which gradually fades to a luminous pink during warm weather. Ball Orig. Seed. Tr. pkt., \$1.50; ½4 oz., \$3.25; ½3 oz., \$6.00.
- Ball Red. Medium large flowers of bright true scarlet are freely produced on fairly dwarf plants. Ball Orig. Seed.
   Tr. pkt., \$1.50; ½4 oz., \$3.25; ½2 oz., \$6.00.

Ball White. Rather small flowers but very freely produced. Ball Orig. Seed. Tr. pkt., \$1.50; ¼4 oz., \$3.00; ⅓2 oz., \$5.50.

Flamingo. Bi-colored white with pink edge. Tr. pkt., \$1.50; ½4 oz., \$4.50.

• Luminosa Compacta. Dwarf, free flowering scarlet-red. Tr. pkt., \$1.50; ½4 oz., \$3.00; ½3 oz., \$5.50.

Saga. Extra dwarf and dense growth, Small bright red flowers. Tr. pkt., \$1.50;  $\frac{1}{104}$  oz., \$4.00;  $\frac{1}{102}$  oz., \$7.50.

• Snowbank. Large, glistening white flowers are carried on dense growing plants. The best white.

Tr. pkt., \$1.25; ½4 oz., \$2.75; ½2 oz., \$5.00.

Dwarf Varieties Mixture. Our own formula mixture of dwarf varieties. Tr. pkt., \$1.00; \%4 oz., \$2.50; \%2 oz., \$4.50.

#### **INTERMEDIATE** (6 to 10 Inches)

- Carmen. Bright rose-pink flowers with rich bronze leaves. Tr. pkt., \$1.25; 1/4 oz., \$2.75; 1/32 oz., \$5.00.
- Indian Maid. Foliage a deep lustrous bronze with scarlet flowers. Tr. pkt., \$1.25; 1/4 oz., \$2.75; 1/2 oz., \$5.00.

Luminosa. Very attractive and popular bright red with green foliage tipped with red. Tr. pkt., \$1.25; 1/64 oz., \$3.00; 1/32 oz., \$5.50.

- Scandinavia Pink. Very free flowering bright rose-pink. Fine bushy habit. Tr. pkt., \$1.25; ½4 oz., \$2.75; ½2 oz., \$5.00.
- Scandinavia Red. Identical to the above except for its bright red flowers. Tr. pkt., \$1.25; 1/64 oz., \$2.75; 1/32 oz., \$5.00.

Scandinavia White. A white Scandinavia selection. Tr. pkt., \$1.25; ½4 oz., \$2.75; ½2 oz., \$5.00.

#### **SPARKLER**<sup>™</sup>

Large flowers of brilliant orange-salmon with each petal base a contrasting creamy white. The only true salmon Begonia we have ever seen. Ball Orig. Seed.

Tr. pkt., \$1.50; \( \frac{1}{64} \) oz., \$3.25; \( \frac{1}{32} \) oz., \$6.00.

White Pearl. Medium sized white flowers with green leaves, tinged pink; reddish stems. Tr. pkt., \$1.25; ½4 oz., \$2.50.

Intermediate Varieties Mixture. Made up of the above separate colors. Tr. pkt., \$1.25; ½ oz., \$2.25; ½ oz., \$3.75.

### **Begonias**

#### FIBROUS ROOTED

**ANNUAL** (B. semperflorens)

1,000,000 S. 2-3 weeks 65-75°

Begonias are, if anything, more popular today than they were years ago. Better varieties, including the new  $F_1$  Hybrids, are playing their part in keeping this versatile plant close to the top of the list of seed grown pot plants. They are equally "at home" in 5-inch pots, as less expensive plants in 3- or 4-inch pots, and in combinations of all sorts. Here is one blooming plant which will do well in the low-light, high temperature conditions of modern homes.

In addition, the stronger growing varieties, especially the F<sub>1</sub> Hybrids, make good bedding plants even in full sun—and for partially shaded spots they are ideal.

Culture: Use neutral (non-acid) peat for germination; no soil covering over the seed. Keep surface of flat moist. Use half peat, half soil for potting. They must have 60° to keep them moving—and greenhouse shade in summer. Sow December-January for nice 3-inch plants for May bedding sales and combination work.

#### = DWARF BRONZE-LEAVED VARIETIES =

- Ball Dwarf Carmen. Compact habit with rich bronze leaves and light pink flowers. Ball Orig. Seed.
- Dwarf Indian Maid. The popular scarlet flowers and bronze foliage of Indian Maid in new, dwarf and compact form.
- Frosty. Pure white flowers contrasting vividly with rich bronze-colored leaves. Dwarf and compact. The first bronze-leaved Begonia with white flowers.

Bronze-Leaved Varieties Mixture. Dwarf bronze-leaved plants with red, pink and white flowers. A formula blend.

Prices above 4, each: tr. pkt., \$1.50; \( \frac{1}{64} \) oz., \$3.50; \( \frac{1}{32} \) oz., \$6.50.

#### TALL (Over 10 Inches)

Christmas Cheer. Large flowered, deep rose-red. Tr. pkt., \$1.00; \( \frac{1}{2} \) oz., \$2.00; \( \frac{1}{2} \) oz., \$3.75.

Masterpiece. Extra large flowered, light pink. Tr. pkt., \$1.25; ½4 oz., \$2.25; ½32 oz., \$4.00.

Silver Wings. Extra large, pure white flowers, *Ball Orig Seed*. Tr. pkt., \$1.00; ½4 oz., \$2.60; ½3 oz., \$3.75.

Tall Varieties Mixture. A formula mixture of the above strong growing sorts. Tr. pkt., \$1.00;  $\frac{1}{100}$  oz., \$2.00;  $\frac{1}{100}$  oz., \$3.75.

#### FHYBRID BEGONIAS

Seed of these varieties is produced by the same method as Hybrid Snaps and Petunias. For absolute uniformity they're unexcelled, and their Hybrid vigor makes them better adapted to outdoor bedding use than the older inbred varieties. Why not try some this year?

- Lucifer. Brilliant scarlet flowers with deep, bronzy foliage. This F<sub>1</sub> Hybrid Begonia makes a good outdoor bedding plant. *Originator's Seed*. Tr. pkt., \$1.50.
- Pink Pearl. Resembles Adeline in flower size, rich pink color and uniformly dwarf, compact growth. Originator's seed. Tr. pkt., \$1.50.
- Pink Profusion. A vigorous, dense grower with freely produced coralpink flowers and green leaves with red veins. Did exceptionally well in outdoor trials exposed to full sun and high temperatures. Try this for bedding. Tr. pkt., \$1.50.

Pink Tausendschon. Dwarf. Bright pink; closely resembles Adeline and pink Pearl in habit. Originator's seed. Tr. pkt., \$2.00.

Red Tausendschon. Same as Pink Tausendschon except for clear red color. Originator's seed. Tr. pkt., \$2.00.

- Red Pearl. Dwarf. Identical to Pink Pearl except for its Luminosa red color. Originator's seed. Tr. pkt., \$1.50.
- White Tausendschon (New). Same as the above Tausendschon varieties except for its pure white color. Tr. pkt., \$2.00.
- Stuttgart. Bright pink flowers with rich bronze foliage. Because of its Hybrid vigor, this variety is well suited for outdoor bedding use. Originator's seed. Tr. pkt., \$1.50.



#### ORGANDY MIXTURE

An excellent mixture of F<sub>1</sub> Hybrids in shades of red, pink and white. Plants are uniform in habit and their hybrid vigor makes them well adapted for outdoor bedding, even in full sun.

This outstanding Begonia blend has been granted an Honorable Mention and a Special Award by the American Begonia Society. Tr. pkt., \$1.50.

### **Begonias**

#### NEW THYBRID CINDERELLA STRAIN

Cinderella Rose (A Ball origination). A remarkable new type of Fibrous Rooted Begonia (pictured at right) bearing bright rose-pink flowers each with a large, attractive, golden yellow center. This type has been available before now only from cuttings. About half the plants are as described, the balance being perfectly salable regular type Begonias.

Cinderella White (A Ball origination). Identical to Cinderella Rose except for its glistening white flowers with contrasting bright gold centers.

Cinderella Mixture. (A Ball origination). The above two colors plus shades of lighter pink are included in this showy blend.

Prices above 3, each: ½ tr. pkt., \$1.75; tr. pkt., \$3.00; ½28 oz., \$9.00.

#### TUBEROUS ROOTED

Superb Camellia-flowered, double strains from one of the world's foremost Tuberous Begonia specialists. Sow Dec.-Feb. for May-June sales. Need 65-70° for good germination and early stages of growth.

Scarlet Rose Copper White Prices above 8 separate colors, each: ½ tr. pkt., \$1.75; tr. pkt., \$3.00.

Orange

• Tuberous Rooted Double Mixture. Camellia-flowered. 90% good doubles, Gorgeous colors. ½ tr. pkt., \$1.75; tr. pkt., \$3.00.

Salmon

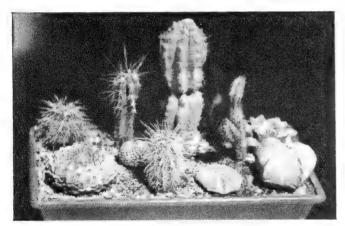
#### OTHER BEGONIAS

Pendula Mixture (Lloydi). Pendulous. Double flowers, about 2 inches, in shades of scarlet, rose, salmon and white. Fine for hanging baskets. Tr. pkt., \$3.00.



CINDERELLA ROSE

A remarkable new type of Fibrous Rooted Begonia bearing bright rose-pink flowers, each with a large, attractive, golden yellow center. Also available in white and mixture.



#### FLOWERING CABBAGE

#### ANNUAL

Yellow

12,000 S.

Under cool late fall and winter conditions this novel plant produces large, showy, fringed leaves in various ivory, light green, pink and purple shades. Sow seed in early July for attractive winter pot plants. Tr. pkt., 40c; ½ oz., \$1.20; 1 oz., \$3.60.

#### CACTUS

#### ANNUAL

8,000-12,000 S. 6 weeks 70-75°

All Sorts Mixture. (Pictured at left). Many unusual varieties are included in this choice blend.

Tr. pkt., 65c; ½ oz., \$2.00; ½ oz., \$6.00.

CACTUS-ALL SORTS MIXED

#### CALCEOLARIAS

ANNUAL (C. herbeahybrida)

Red

600,000 S. 2-3 weeks 65-75°

Calceolarias aren't at all diffcult to grow from seed if a few simple requirements are met. In sowing use only loose, sterilized materialtemperature 60°. The seed is very fine and no soil covering should be used. After seedlings are well up 50° will suit them nicely. When large enough to handle, they should go into small Jiffy-Pots or bands -later into 4- or 5-inch pots for finishing. A regular insect control program is essential (aphis will wreck them in no time). We spray regularly with Parathion. From late Feb. on they'll need some shade. Water only when needed; "wet feet" will cause yellowing of foliage.

- Extra Early Tigered. Solid heads of medium large flowers on dwarf plants; good color range. It blooms nearly a month before other varieties, costs less to grow. Ball Orig. Seed. Tr. pkt., \$2.00;  $\frac{1}{128}$  oz., \$4.00;  $\frac{1}{164}$  oz., \$7.20;  $\frac{1}{32}$  oz., \$13.00.
- Grandiflora Dwarf Mixture. Extra large (2-21/2 in.) flowers in unusual and striking colors are carried on fairly dwarf plants. Tr. pkt., \$1.25;  $\frac{1}{64}$  oz., \$2.75;  $\frac{1}{32}$  oz., \$5.00.
- Hybrid Mixture. XE HYBRID Showy reds and rich yellows. ½ tr. pkt., \$1.75; tr. pkt., \$3.00.

Rugosa Mixture. Large heads of quite small flowers in a good color mixture. Tr. pkt., \$1.25.

Triumph Strain. Medium large flowers; mostly bright reds and yellows. Tr. pkt., \$1.25;  $\frac{1}{164}$  oz., \$2.75;  $\frac{1}{162}$  oz., \$5.00.

#### • BALL MULTIFLORA NANA MIXTURE

(Pictured below). Large heads of medium sized flowers in brilliant reds, yellows and intermediate shades. The dwarf plants are wiry in growth with small, durable leaves which make for ease in handling and shipping. Ball Orig. Seed. Tr. pkt., \$2.00; ½<sub>128</sub> oz., \$4.00; ½<sub>64</sub> oz., \$7.20; ½<sub>2</sub> oz., \$13.00.







#### **CALENDULA**

ANNUAL (C. officinalis)

3000 S. 2-3 weeks 65-75°

#### GREENHOUSE VARIETIES

Ball Calendulas were originated and developed by Geo. J. Ball as his first contribution to the long list of "Flower Seeds for Florists" which our firm has introduced to the florist trade in the past 50 years. Constant selection and breeding keep the strains in top shape. Ball Orig. Seed. This long-stemmed class will flower freely during the spring months from a January sowing. Sow Aug.-Sept. for mid-winter cutting.

Ball Improved Long Orange. Bright orange with light eye.
 Ball Masterpiece. Deep glowing orange with dark eye.
 Ball Lemon Queen. Lemon-yellow with dark brown eye.

• Ball Gold. Deep golden yellow with light eye.

Prices above 4, each: tr. pkt., 50c; 1/4 oz., \$1.00; 1 oz., \$3.00; 4 ozs., \$9.00.

Ball Formula Mixture. Carefully made up of our named varieties with fully half orange.

Ball Art Shades Mixture. Contains many original and unusual shades and interesting bicolors.

Prices above 2, each: tr. pkt., 40c; ¼ oz., 80c; 1 oz., \$2.40; 4 ozs., \$7.20.

#### BEDDING VARIETIES

Showy for bedding where summer heat is not excessive.

#### PACIFIC BEAUTIES

These improved Calendulas are more resistant to summer heat than the ordinary bedding class. Originator's seed.

Apricot Beauty. Attractive two-toned rich apricot.

- Lemon Beauty. A pure lemon-yellow; wide petals.
- Persimmon Beauty. Brilliant, true persimmon-orange.
- Pacific Beauty Mixture. A blend of the above three.

Prices above 4, each: tr. pkt., 35c; 1/4 oz., 60c; 1 oz., \$2.00.

#### REGULAR BEDDING VARIETIES

Lemon Queen. Light lemon-yellow.

Orange King. Deep orange with dark eye.

Ball Bedding Mixture. Well proportioned dwarf mixture.

Prices above 3, each: tr. pkt., 35c; 1/4 oz., 50c; 1 oz., \$1.50.

#### **CALLIOPSIS**

ANNUAL (Coreopsis tinctoria)

90,000 S. 2-4 weeks 65-75°

Fairly dwarf and very free flowering bedding plants. This is a showy item that we feel every bedding plant grower should try.

Dwarf Mixture. 6-8 in. Attractive, dwarf, compact mixture of red and yellow shades. Tr. pkt., 35c; 1/4 oz., 60c; 1 oz., \$1.80.

#### CAMPANULA (Bell Flower)

**ANNUAL** (C. species)

50,000 S. 2-3 weeks 65-75°

Annual Canterbury Bells Mixture. 2 ft. An annual form of the well known perennial, flowering 6 months from sowing.

Tr. pkt., 50c; ¼ oz., \$1.50; 1 oz., \$4.50.

PERENNIAL (C. species) S. See below 2-3 weeks 65-75°

CARPATICA. 350,000 S. 12 in. Wide, upright, cup-shaped flowers are borne on slender, erect stems. Plants are leafy, compact clumps.

Cullinmore Mixture. Contains many new colors in this dwarf class. Tr. pkt., 60c; ½ oz., \$1.50; ½ oz., \$2.80.

#### **● ROCK GARDEN BLEND**

Desirable, low-growing kinds in a wide range of Campanula colors. Tr. pkt., 75c.

MEDIUM CALYCANTHEMA (Cup-and-Saucer Type), 120,000 S. 3 ft. Biennial. Both this and the following (Medium double) are easily forced for spring greenhouse cut flowers.

Dark Blue Light Blue Rose White Mixture Prices above 5, each: tr. pkt., 30c; ¼ oz., 80c; 1 oz., \$2.40.

MEDIUM DOUBLE (Canterbury Bells), 102,000 S.

Formula Mixture. Tr. pkt., 30c; 1/4 oz., 80c; 1 oz., \$2.40.

PERSICIFOLIA. 340,000 S.  $2\frac{1}{2}$  ft. Perennial. 1 inch, bell-shaped flowers on stiffly erect stems. 15-inch spikes.

Telham Beauty. Large bells of China blue. Tr. pkt., 40c; 1/8 oz., \$1.00; 1/4 oz., \$1.85.

#### CANDYTUFT

ANNUAL (Iberis coronaria)
HYACINTH-FLOWERED.

9500 S. 1-3 weeks 65-75°

#### BALL GIANT WHITE

This is an improved greenhouse-grown premium quality cut flower strain. Earlier flowering and produces larger heads than ordinary strains with their higher percentage of small-flowered culls. Sow Oct. to Jan. for Feb. to May cutting. Ball Orig. Seed. Tr. pkt., 65c; ½ oz., \$2.00; 1 oz., \$6.00; 4 ozs., \$18.00.

● Long-Stemmed White (A Ball Origination). Large trusses of big florets are borne on exceptionally long stems. About a week later than Ball Giant White but considerably longer stemmed.

Tr. pkt., 75c; ¼ oz., \$2.00; 1 oz., \$6.00; 4 ozs., \$18.00.

Giant White, Regular. European grown seed. Tr. pkt., 25c; ½ oz., 50c; 1 oz., 90c; 4 ozs., \$3.00; 1 lb., \$10.00.

● Ruffled White. Ruffled petals add interest to this excellent cut-flower strain. Tr. pkt., 50c; ½ oz., \$1.40; 1 oz., \$2.50. UMBELLATA. A popular spring greenhouse cut flower, Sow in January; plant out 8-10 in. Is also widely used as a winter outdoor crop in Florida

and southern Texas.

Flesh-Pink Lavender
White (Lilac)
Rose-Cardinal Formula Mix.

Prices above 5, each: tr. pkt.,
30c; 1 oz., 90c; 4 ozs., \$3.00.

#### • FAIRY MIXTURE

Extra dwarf (8 in.) growth, producing perfectly mounded plants in white, pink, lavender and crimson. Uniform in growth and very early. Fine for "pak" or flat sales.

Tr. pkt., 35c; ½ oz., \$1.00; 1 oz., \$3.00.

Perennial Candytuft. See Iberis, page 23.

#### CANNA

ANNUAL (C. generalis)

CANDYTUFT FAIRY MIXTURE Ideal for "pak" or flat sales.

100 S. 8 weeks 65-75°

Giant Mixture. Select your own new varieties from this formula mixture. If sown in January, seedlings will usually bloom the first summer, and selected plants may be propagated from tubers. Soak seed before sowing over good bottom heat.

1 oz. (about 100 seeds), \$1.50; 4 ozs., \$5.00.

#### CARNATION

ANNUAL (Dianthus caryophyllus) 14,000 S. 2-3 weeks 65-75° An early sowing planted outdoors, preferably under cloth protection, will produce a nice crop of summer Carnations for cutting. Some supporting necessary. A garden favorite in cool climates.

• Giant Malmaison, J. M. Bridgeford. Of sturdy, upright habit. If well grown, supported and disbudded, flowers comparable to those produced in the greenhouse can be had outside where summers are moderate. A superior mixture. Tr. pkt., 40c; ¼ oz., \$1.25; 1 oz., \$3.75. Marguerite Double Mixture. 15-20 in. Ours is a reselected strain of

this very free flowering summer Carnation. An old favorite. Tr. pkt., 25c; ¼ oz., 65c; 1 oz., \$2.25.

CHABAUD'S GIANT IMPROVED STRAIN. The preferred strain for outdoor bedding use.

Cardinal-Red (Sparkler)
 Deep Rose (Rose Queen)
 Deep Salmon (Aurora)

Flesh-Pink (Reine Rose)
White (Jeanne Dionis)
Yellow (Marie Chabaud)

Prices above 6, each: Tr. pkt., 40c; 1/4 oz., \$1.25; 1 oz., \$3.75.

## Sixteen

#### FORMULA MIXTURE

This fine formula mixture includes all Carnation colors. The preferred strain for bedding. See this in color on page 14.
Tr. pkt., 40c; ¼ oz., \$1.25; 1 oz., \$3.75.

ENFANT DE NICE. A fine standard strain.

Red Salmon White Yellow Formula Mixture Prices above 5, each: Tr. pkt., 75c; ½ oz., \$2.25; ½ oz., \$6.75.

#### **CARNATIONS, Continued**

#### PERENNIAL

(Dianthus caryophyllus)

14,000 S. 2-3 weeks 65-75°

GRENADIN (Hardy Carnation). 20 in. Good for cutting.

King of the Blacks. Darkest red. • Pink

Golden Sun

• Mixture. A specially blended strain with extra large, fully double flowers on long, stiff stems. Excellent color balance.

Prices above 6, each: Tr. pkt., 60c; ¼ oz., \$2.00; 1 oz., \$6.50.

Castor Bean. See Ricinus, page 46.

#### CELOSIA

See page 14.

#### **CENTAUREA**

ANNUAL (C. species)

7000 S. 2-4 weeks 65-75°

CYANUS (Bachelor Button or Cornflower). Attractive and useful for spring greenhouse cutting from a December or January sowing, and widely flowered outdoors in summer. All of the following are the finest reselected florist strains.

#### • BLUE BOY =

The bright blue of this popular Cornflower has been prized by gardeners for years. Be sure to grow plenty for your bedding

Tr. pkt., 20c; 1 oz., 65c; 4 ozs., \$2.20; 1 lb., \$6.50.

• Pinkie (Rosie). Improved rosepink.

• Snowman. Fine clear white. Formula Mixture.

Red Boy. Deep carmine-rose.

Prices above 4 each: \(\frac{1}{4}\) oz., 20c; 1 oz., 65c; 4 ozs., \$2.20; 1 lb., \$6.50.

#### **DWARF CENTAUREAS**

Dwarf and bushy. Ideal for borders and general bedding. Height 10-12 in. Also make a satisfactory pot plant.

• Jubilee Gem. Bright cornflower-blue.

Gem Mixture. Red, pink, blue, maroon and white.

Prices above 2, each: Tr. pkt., 35c; 1/4 oz., 60c; 1 oz., \$1.80.

IMPERIALIS (Sweet Sultan). 30 in. Very showy thistle-like flowers; larger than the Cyanus type.

Suaveolens (Yellow Sweet Sultan). 20 in. Bright yellow. Forces well indoors.

Tr. pkt., 30c; 1/4 oz., 80c; 1 oz., \$2.40.

DUSTY MILLERS. The silvery white-leaved kinds for border work. Cineraria Maritima Diamond also belongs in this group.

**Candidissima.** 6 in. The slow growing kind that must be started early. Tr. pkt., 60c;  $\frac{1}{4}$  oz., \$1.25; 1 oz., \$3.75.

Gymnocarpa. 2 ft. Strong growing, fern-leaved.

Tr. pkt., 35c; ¼ oz., 60c; 1 oz., \$1.80.

PERENNIAL (C. montana)

1600 S. 3-4 weeks 65-75°

Montana. 2 ft. Large cornflower-blue flowers.

Tr. pkt., 25c; ¼ oz., 50c; 1 oz., \$1.50.

#### CERASTIUM

**PERENNIAL** (C. tomentosum)

42,000 S. 2-4 weeks 65-75°

Tomentosum. 10 to 12 in. An excellent spreading garden perennial with silvery foliage and small white flowers. Tr. pkt., 30c;  $\frac{1}{4}$  oz., 60c; 1 oz., \$1.80.

#### CHEIRANTHUS (Siberian Wallflower)

PERENNIAL (C. cheiri)

19,000 S. 2-3 weeks 65-75°

Does best in cool climates.

• Golden Bedder. 18 in. Large, deep golden yellow. Tr. pkt., 25c; ¼ oz., 40c; 1 oz., \$1.20.

Orange Queen. 18 in. Free flowering brilliant orange.

Tr. pkt., 25c; 1 oz., 50c; 4 ozs., \$1.50.

Annual Wallflower. See page 58.



CENTAUREA, BLUE BOY

#### CHERRY, CHRISTMAS

ANNUAL (Solanum pseudo-capsicum) 12,000 S. 3-4 weeks 65-75° Sow in February, summer plants outdoors; lift and pot in September for Christmas pot plants. Or to save labor carry in pots in frames during

• Ball Christmas Cherry (Hlavaeck's Masterpiece), A uniform, bushy strain. Large, round, red fruit is very freely produced. Ball Orig. Seed. Tr. pkt., 50c; ¼ oz., \$1.25; 1 oz., \$3.75.

Patterson Christmas Cherry. More dwarf and compact than Ball Christmas Cherry. Well suited for smaller sized pots. Tr. pkt., 75c; ¼ oz., \$1.50; 1 oz., \$4.75.

See also Pepper, Christmas, page 31, and Love Apple, page 27.

#### CHRYSANTHEMUM

ANNUAL (C. species)

9000 S. 2-5 weeks 65-75°

A nice spring greenhouse "catch crop" for cutting. Also quite showy for bedding.

• Rainbow Mixture (Carinatum), 2 ft, A brilliant mixture of annual Chrysanthemums including many entirely new shades and color combinations. Tr. pkt., 25c; ¼ oz., 75c; 1 oz., \$2.25.

PERENNIAL (C. species)

70,000 S. 2-4 weeks 65-75°

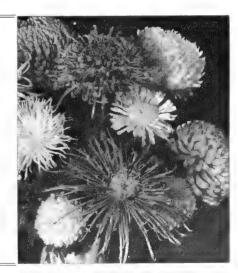
Glory Mixture. 11/2 to 2 ft. Our finest mixture of hardy Chrysanthemums with an exceedingly wide range of brilliant colors. Contains Korean and Arcticum Hybrids, Azaleamums, Indicums, and Morifoliums. Tr. pkt., \$1.00; ½ oz., \$2.50; ½ oz., \$4.50.

Korean Mixture. 11/2 to 2 ft. Single and semi-double types in a good color range. Some bloom rather late for localities with early frost dates. Tr. pkt., \$1.00; ½ oz., \$2.50; ¼ oz., \$4.50.

#### • MIKADO=

A mixture of greenhouse, cut flower varieties in a wide color range. Large Mums, Pompons, Anemones, and Spider types are included in this novel assortment. Seed sown in March will produce flowers the following fall and early winter.

Tr. pkt. (250 seeds), \$5.00.



CINERARIA, CLARKIA, CLEOME and COBAEA ON PAGE 16.

## Celosia

#### ANNUAL

(C. argentea cristata) 28,000 S. 1-2 weeks 65-75° One of the finest, most uniform and colorful items for annual plant sales. Celosias will come into bloom prematurely with small heads if growth is checked. Therefore, for spring plant sales do not sow earlier than 6 weeks before planting-out time, and grow warm-at least 60° nights.

CRISTATA. The popular Cockscomb type. The taller varieties provide good cut flowers in either the fresh or dried state, while the dwarf kinds make nice pot plants in summer. Closer spacing decreases size of heads, making them more suitable for cutting.

Empress (Dwarf). 12 in. Large crimson combs with deep reddish leaves.

Tr. pkt., 30c; 1/4 oz., 80c; 1 oz., \$2.40.

Gilbert's Gold Dust. Yellow, turning a deep gold.

Gilbert's Rose Beauty. Ruffled, ball-shaped heads.

Gilbert's Maple Gold. Light to dark pink, tipped with gold.

Prices above 3, each: Originator's tr. pkt. (300 seeds), 50c; 5 pkts.,

Gladiator. 8 in. Golden yellow combs on dwarf plants with light green leaves. Improved strain. Tr. pkt., 50c; ¼ oz., \$1.50; 1 oz., \$4.50.

8 in. A fine uniform strain of red combs with green leaves. Immense blooms on extremely dwarf plants make Kardinal quite striking. Useful for pots, bedding, borders and combinations. Tr. pkt., 50c; 1/8 oz., \$1.40; 1/4 oz., \$2.50; 1 oz., \$7.50.

• Red and Gold. 2 ft. Large combs gaily marked wine-red and yellowgold with bright green leaves.

Tr. pkt., 50c; ½ oz., \$1.50; ½ oz., \$5.00.

Royal Velvet. 30 in. Crimson combs borne well above foliage. Tr. pkt., 40c; ¼ oz., \$1.20; 1 oz., \$3.60.



#### TOREADOR

VALL-AMERICA DISELECTION / Large combs up to 12 inches across of lustrous, bright red are carried on plants 18-20 inches high. Stems are very stiff and sturdy with luxurious, bright green foliage.

Ball Orig. Seed. Tr. pkt., 75c; ¼ oz., \$2.00; 1 oz., \$6.00.

• Dwarf Mixture. 8 in. A choice mixture of all colors in this class with both light and dark foliage. A new, improved strain.

Tr. pkt., 50c; ½ oz., \$1.40; ¼ oz., \$2.50; 1 oz., \$7.50. Tall Mixture. 31/2 ft. Mixture of all colors in the tall class.

Tr. pkt., 35c; 1/4 oz., 80c; 1 oz., \$2.40.





CELOSIA, FOREST FIRE AND GOLDEN FEATHER

PLUMOSA. Plumed or feathery type, producing spire-like branches. mostly from base of plant. The dwarf varieties are widely used for bedding and as spring and summer pot plants, while the taller strains make useful cut flowers in late summer.



#### FOREST FIRE=

21/2 ft. Brilliant plumes of fiery orange-scarlet contrast strikingly with the bronzy red foliage, Visitors at our trial grounds are impressed with its showiness and uniform habit. An improved

strain. Tr. pkt., 50c; 1/4 oz., \$1.50; 1 oz., \$4.50.

Golden Fleece. 4 ft. Large, dense golden yellow plumes on vigorous plants. Makes a good cut flower. Tr. pkt., **40c**; ¼ oz., **\$1.20**; 1 oz., **\$3.60**.

Scarlet Plume, 4 ft. Bright crimson-scarlet. Very colorful for fall borders and cutting. Tr. pkt., 40c; 1/4 oz., \$1.20; 1 oz., \$3.60.

Spicata. 5 ft. Long, slender, silvery rose spikes for fresh cut flowers or for drying, Tr. pkt., 40c; ½ oz., \$1.20; 1 oz., \$3.60.

• Thompsoni magnifica.  $2\frac{1}{2}$  ft. Contains strikingly brilliant reds and yellows with some copper and gold shades. This makes an excellent cut flower. Tr. pkt., 30c; 1/4 oz., 60c; 1 oz., \$2.00.

#### DWARF FEATHER VARIETIES

These "feather" varieties are really outstanding as a bedding subject where a rather dwarf, strong color accent is wanted. Also used for combinations and pots. Our trials of Fiery Feather and Golden Feather draw much favorable comment each year.

- Fiery Feather. 12 in. Very attractive pyramid formation with fiery red spires.
- Golden Feather. 12 in. Same as above but golden yellow.
- Feather Mixture. A formula mixture of the above two varieties: 2/3 Fiery Feather, 1/3 Golden Feather.

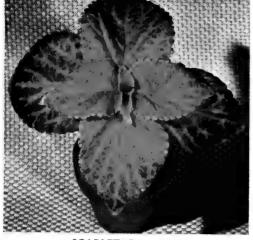
Prices above 3, each: tr. pkt., 30c; 1/8 oz., 70c; 1/4 oz., \$1.30; 1 oz.,



CELOSIA TOREADOR

Both of these varieties are included in our Sweet Sixteen list this year.

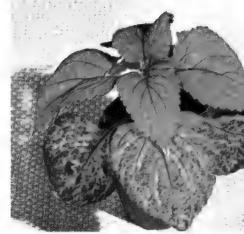




SCARLET RAINBOW



CANDIDUM



PINK RAINBOW

### COLEUS

#### BALL RAINBOW

Originator's Seed

ANNUAL (C. blumei) 100,000 S. 2-3 weeks 70-80° Nearly fifteen years of carefully controlled breeding work has gone into the development of Ball Rainbow Coleus, starting with the original selection made by Geo. J. Ball, Today this strain is used throughout the country by thousands of growers who have come to depend upon it for combination use and bedding plant sales. Many, in fact, use Ball Rainbow Coleus exclusively, in place of cutting propagated varieties. All of this seed is produced in our West Chicago greenhouses under our careful supervision.

#### SEVEN SEPARATE COLORS

We are now offering seven distinct separate colors originally selected out of the Rainbow Mixture. These strains come at least 90% true to color-the balance being entirely salable specimen plants. This offer therefore makes straight colors similar to named cutting varieties like Butterfly, Christmas Gem and Brilliancy available from seed. Cuttings from these seedlings root freely, of course. The plant habit is dwarf and base-branching, and satisfies all the requirements of this versatile shadehouse plant subject. Ideal for combination boxes or pots and for budget 3-in. pot sales.

Coleus should have full sun in winter, light shade in spring greenhouse. As a house plant it requires full sun. In the garden it does well in complete or partial shade. Good 3-in. pots come in 3 months or less from seed at 65°, bedding Coleus in "paks" take about two months.

#### **● BALL RAINBOW MIXTURE** =

Developed over a decade ago by Geo. J. Ball, through careful selection the Ball Rainbow Coleus Strain has no equal in the world today. We have trialed all important commercial strains

-none match this strain for its high percentage (90%) of bright warm Coleus colors which even excel the brilliance and luster of many of the best known cutting propagated varieties. Rich reds, yellows, coppers, pinks, all abound in infinite varieties of tones and shades. Uniform habit with freely borne medium sized leaves. Ideal for combinations, shade planting, and wherever Coleus are useful. This seed is greenhouse-grown at West Chicago. Be sure that no seedlings are discarded to insure balanced mixture of colors.  $\frac{1}{2}$  tr. pkt., \$1.00; tr. pkt., \$1.75;  $\frac{1}{64}$  oz., \$2.75;  $\frac{1}{32}$  oz., \$5.25;  $\frac{1}{16}$  oz., \$9.50.

- Candidum. Pictured above. A striking combination of brilliant green and soft ivory. Wonderfully showy for use in plant combinations, blending well with all other colors. 90% true to type. Ball Orig. Seed.
- Golden Rainbow. A rich, golden chartreuse flecked with pale green. Makes a wonderful contrast with red leaved varieties, 90% true to type. Ball Orig. Seed.
- Pastel Rainbow. Soft shades of light salmon-pink and pale green provide a wealth of spring-like freshness in this pleasing variety, 90% true to type. Ball Orig. Seed.
- Pink Rainbow. Pictured above. Medium sized leaves of rich coralpink blending to salmon with small green border. Unusually attractive and 90% true to type. Ball Orig. Seed.
- Red Rainbow. A bright combination of deep mahogany-red and brilliant carmine-rose edged green. Bushy plants with medium sized leaves. 90% true to type. Ball Orig. Seed.

#### IMPORTANT!



Seed of all Ball greenhouse-grown Coleus varieties, including our Rainbow Mixture, is produced at West Chicago each year from carefully controlled parent lines. It is important that genuine Ball originator's seed be used if top quality is wanted. Other strains are, of necessity, 2 generations removed from the original breeding stock, and often give unsatisfactory results.

- Scarlet Rainbow. Pictured above. Brilliant scarlet-red with narrow green edge. The most colorful of all when plants are the size for combination use. Darkens somewhat as plants grow larger and older. 90% true to type. Ball Orig. Seed.
- Velvet Rainbow. Visitors at our greenhouses have frequently remarked about the wonderful brilliance of this blood-red variety with darker velvety overtones. 90% true to type. Ball Orig. Seed.

Price last 7 each: ½ tr. pkt., \$1.50; tr. pkt., \$2.50; 1/64 oz., \$3.30;  $\frac{1}{32}$  oz., \$6.00;  $\frac{1}{16}$  oz., \$11.00.

COLLECTION: Tr. pkt. each of Pastel Rainbow, Velvet Rainbow, Scarlet Rainbow, Red Rainbow, Pink Rainbow, Golden Rainbow, and Candidum. 7 tr. pkts. for \$15.75.

#### Other Varieties

Ball Copper Giant. Large leaves of copper-rose. 75% true to type. Ball Orig. Seed. Tr. pkt., \$1.25; \(\frac{1}{32}\) oz., \$2.50.

• Giant Exhibition Mixture. An extra large-leaved strain with exceptional brilliance of coloring

Tr. pkt., \$1.25;  $\frac{1}{32}$  oz., \$2.50;  $\frac{1}{16}$  oz., \$4.75.

Standard Mixture. This is a field-grown mixture. European grown reproduction of our Ball Rainbow Strain. Tr. pkt., 75c;  $\frac{1}{32}$  oz., \$1.80;  $\frac{1}{16}$  oz., \$3.25.



#### CLEOME

PINK QUEEN

The newly opened flowers of the large (6 to 7 in.) heads are a luminous rosy pink, later changing to pure white for a pleasing bicolor effect. Makes a gorgeous hedgelike row about 4 ft. tall and 3 to 4 ft. across. Tr. pkt., 35c; 1/4 oz., 55c; 1 oz., \$1.90. SEE PAGE 16 FOR OTHER CLEOME



Gro. g. Ball

Cinerarias make attractive, colorful pot plants. See page 112 for suggestions.



#### CINERARIA

ANNUAL (Senecio cruentus)

150,000 S. 2-3 weeks 65-75°

Cinerarias will make nice 3-inch plants in May for combination work, or budget sales, if sown Dec-Jan, and kept growing right along. Sow from June on for Christmas and later.

• Cremer's Prize Strain (Our own reselected stock). Extra large heads of medium small flowers in widely varied color assortment; about half light-eyed. Small foliage.

Tr. pkt., \$1.75; ½4 oz., \$2.50; ½32 oz., \$4.50; ½6 oz., \$8.25.

• Dwarf Erfurt Mixture. Dense heads of medium sized flowers in a fine color balance, including copper, salmon, and maroon in addition to the usual Cineraria colors. Habit is compact and very uniform. Tr. pkt., \$1.50; ½4 oz., \$2.50.

Dwarf Giant Exhibition Mixture. Extra large flowers on medium dwarf plants. For exhibition work. Tr. pkt., \$1.50; ½4 oz., \$2.75.

#### FESTIVAL

This is our own small-leaved strain requiring a minimum of bench space. Plants are bushy and compact with even heads of medium sized, mostly white-eyed flowers in a brilliant color range. We're sure this strain is unexcelled. Ball Orig. Seed. ½ tr. pkt., \$1.75; tr. pkt., \$3.00; ½ oz., \$4.50; ½ oz., \$7.50; ½ oz., \$13.00.

Grandiflora Dwarf Mixture. 112,000 S. Large flowers in rich colors with contrasting large white eyes. Dwarf growth. Tr. pkt., \$1.00; ½4 oz., \$2.00; ½2 oz., \$3.75.

H. & S. Super Giants Superb Mixture. Similar to Dwarf Giant Exhibition Mixture. A fine strain in a complete color range. Originator's seed. Tr. pkt., \$1.50; ½4 oz., \$2.50; ½2 oz., \$4.50; ½6 oz., \$8.50.

Multiflora Nana, Gold Center. 200,000 S. Attractive, medium small, solid colored flowers with yellow anthers. Good shipper.
 Tr. pkt., \$1.25; ½4 oz., \$2.25; ½32 oz., \$4.00.

No. 1 Mixture. Consists of Cremer's Prize Strain and Siter's Rainbow Strain in equal proportions.
 Tr. pkt., \$1.50; ¼4 oz., \$2.50; ½3 oz., \$4.75.

• No. 2 Mixture. Contains ½ Cremer's Prize Strain and ¼ each Siter's Rainbow Strain and Multiflora Nana, Gold Center Strain. Tr. pkt., \$1.50; ¼4 oz., \$2.50; ½3 oz., \$4.75.

Siter's Rainbow Strain. 112,000 S. Immense heads of medium large, mostly white-eyed flowers.
 Tr. pkt., \$2.00; ½4 oz., \$2.75; ½2 oz., \$5.00; ½6 oz., \$9.00.

**Stellata Mixture** (Star type). Small, free flowering strains. 24 to 30 in. tall. Tr. pkt., \$1.00;  $\frac{1}{2}$  oz., \$2.50.

"Vivid" Formula Mixture. A complete mixture of solid colors (without "eyes"). Dwarf with well rounded heads and fairly small leaves. Blooms about a month later than other strains.

Tr. pkt. (1000 seeds), \$1.75; ½4 oz., \$2.75; ½2 oz., \$5.00.

Also available in the following separate colors at the same price:
White, Bright Red, Brick-Red (Matador), Light Blue, Mid-Blue,
Pink Shades and Salmon.

DUSTY MILLER. 85,000 S.

Maritima Diamond. 10 in. An improved strain of our finest Dusty Miller. Compact, even growth and very white foliage.
 Tr. pkt., 20c; ¼ oz., 50c; 1 oz., \$1.50.

#### CLARKIA

ANNUAL (C. elegans)

90,000 S. 1-2 weeks 65-75°

Popular double type for spring cut flower use. Sow in January and grow in flats, disbudding to 2 or 3 spikes for long-stemmed flowers. Don't feed and keep fairly dry after plants are about a foot high to prevent over-soft, lanky growth.

Salmon Queen Mixture

Prices above 2, each: tr. pkt., 25c; 1/4 oz., 75c; 1 oz., \$2.25.

#### **CLEOME** (Spider Plant)

ANNUAL (C. spinosa)

12,500 S. 1-2 weeks 65-75°

Good bedding plant for backgrounds. Starts slowly but grows fast in garden.

Golden Sparkler (C. lutea). 5500 S. 3 ft. Bright golden orange. An unusual Cleome color. Germinate cool or sow directly outside. Tr. pkt., 45c; ½ oz., \$1.25; 1 oz., \$3.75.

Helen Campbell. 4 ft. A sport of Pink Queen, with large heads of glistening pure white flowers. Tr. pkt., 50c; ¼ oz., 90c; 1 oz., \$2.70.



#### PINK QUEEN =

The newly opened flowers of the large (6 to 7 in.) heads are a luminous rosy pink, later changing to pure white for a pleasing bicolor effect. Makes a gorgeous hedge-like row about

4 ft. tall and 3 to 4 ft. across In color on page 15. Tr. pkt., 35c; ¼ oz., 55c; 1 oz., \$1.90.

Purple Queen. 5 ft. Similar to Pink Queen, but with large heads of lilac-purple flowers. Tr. pkt., 50c; ¼ oz., 90c; 1 oz., \$2.70.

#### **COBAEA** (Cup-and-Saucer Vine)

ANNUAL (C. scandens)

375 S. 2-3 weeks 65-75°

A popular, strong growing, annual climber with 2-in. bell-shaped flowers. Reaches 20 ft.

Purple. Tr. pkt., 30c; 1/4 oz., 60c; 1 oz., \$1.80.

#### COLEUS

See page 15.

#### CONVOLVULUS

ANNUAL (C. tricolor)

1400 S. 10 days 6

Royal Marine. This dwarf Morning Glory is almost carpet-like in growth with a profusion of rich, royal blue flowers. Fine for rock gardens or borders. Tr. pkt., 35c; ¼ oz., \$1.00; 1 oz., \$3.00.

#### COREOPSIS

The long, graceful stems and rich, golden yellow color give this plant real value for cutting. We find it best treated as a biennial.

• Sunburst. 2 ft. A fine semi-double strain with 2-inch, golden yellow flowers. Tr. pkt., 20c; ¼ oz., 35c; 1 oz., \$1.10.

#### CORN, ORNAMENTAL

ANNUAL (Zea Mays)

90 S. 1 week 65-75°

Rainbow (Calico or Indian Squaw). Kernels of various colors make attractive ears for fall decoration. 1 oz., 20c; 4 ozs., 50c; 1 lb., \$1.50.

Strawberry. 590 S. Tiny 2-in. ears of rich, shiny mahogany contrast with the straw-colored husks when folded back. 1 oz., 40c; 4 ozs., \$1.40; 1 lb., \$4.00.

Striped. 6-8 ft. Here is an ornamental-leaved Corn, the foliage of which is quite attractive with its contrasting clear yellow stripes on dark green. Try the leaves in floral arrangements. 1 oz., 40c; 4 ozs., \$1.40; 1 lb., \$4.00.

#### COSMOS

ANNUAL (C. bipinnatus)

5000 S. 2-4 weeks 65-75°

SENSATION. 3 ft. The most satisfactory class of Cosmos to grow for cut flower purposes. Extra large flowers and extreme earliness make them suitable for growing outdoors even in northern climates.

- Pinkie. Clear orchid-pink.
- Purity. Extra large flowered pure white.
- Mixture of above and other shades.

Radiance. Deep rose petals with large, rich crimson eye. A striking color combination.

Dazzler. Bright crimson-red.

Prices above 5, each: tr. pkt., 30c; 1/4 oz., 50c; 1 oz., \$1.50.

EARLY SINGLE MAMMOTH FLOWERED

Queen Mixture. All colors in this large flowered class. Tr. pkt., 30c; ¼ oz., 50c; 1 oz., \$1.50.

EXTRA EARLY DOUBLE CRESTED

Produces around 60% large crested flowers.

Mixture. Tr. pkt., 55c; 1/4 oz., \$1.60; 1 oz., \$4.80.

HYBRIDA KLONDYKE, 2800 S.

• Fiesta. Yellow, striped orange. Sturdy plants, good for bedding. Tr. pkt., 30c; ½ oz., 50c; 1 oz., \$1.50.

#### COTTON

ANNUAL (Gossypium hirsutum)

270 S. 12 days 7

A dwarf strain with bright pink buds and creamy blossoms. Sow indoors and plant out after frost. Seed cannot be shipped into California.

Tr. pkt., 35c; 1 oz., \$1.50.

#### **■ CROSSANDRA**

For Potted Plants

ANNUAL (C. infundibuliformis) 4000 S. 7-12 weeks 75-80° Attractive and valuable pot plant with glossy, Gardenia-like foliage, and flower spikes of overlapping clear salmon florets. Can be sown at any time but most easily started in early spring, and flowers 7 to 8 months in a warm house and in rich, well drained soil. Minimum of 65° for best growth. 50 seeds, \$2.00; 200 seeds, \$6.00.



#### CUPHEA

ANNUAL

(C. Llavea miniata) 7000 S. 2-3 weeks 65-75

Very attractive and easily grown bedding plants,

• Firefly. 12 in. Dense, compact plants with freely produced, small, bright scarlet flowers. Also makes an attractive spring pot plant. Tr. pkt., 40c; ½ oz., 75c; ½ oz., \$1.35; 1 oz., \$4.00.

#### CYCLAMEN

**ANNUAL** (C. indicum giganteum)

2500 S. 3-4 weeks 65-75

We conduct regular and extensive flowering trials of Cyclamen strains from the world's leading seed producers, in addition to examining these strains as they are grown in Europe and America. Our conclusion is that no one Cyclamen seed specialist excels in all varieties. As a result, the Ball strains include only those in which each grower (according to our observations—not the grower's claim) excels.

No. 1 Dark Blood-Red.

No. 2 Bright Red.

• No. 3 Pure Rose (Rose of Aalsmeer). Medium salmon-pink.

No. 4 Soft Rose with Carmine Eye. Lavender-rose; wine-red eye.

No. 5 White with Carmine Eye.

No. 6 Pure White. Large flowers.

• No. 7 Bonfire. Brilliant scarlet-salmon.

No. 8 Salmon-scarlet (America-Imp.).

• No. 10 Glory of Wandsbek (Perle of Zehlendorf). Bright deep salmon.

• No. 11 Rose of Zehlendorf. Light salmon.

No. 12 Orange Beauty. Orange-vermilion.

No. 13 Rococo Mixture. Fringed flowers; unusual shapes and markings.

No. 16 Saffron-Red, Silver Edged.

• No. 17 Striped Mixture. Unusually showy and attractive.

No. 18 Mozart. Deep pink.

No. 19 Lavender. Bright fuchsia-orchid.

No. 21 Pink Pearl. Salmon-pink.

No. 22 Baardse Wonder. Salmon with white border.

No. 26 Victoria. Fringed white, tipped red.

No. 51 Ruffled Salmon.

No. 52 Ruffled White.

No. 60 Ruffled Mixture.

Prices above 22, each: 100 seeds, \$2.50; 1000 seeds, \$20.00.

• No. 30 Mixture of above colors: 100 seeds, \$2.00; 1000 seeds, \$15.00.

DISCOUNTS—In addition to our regular cash discounts, the following special discounts are allowed on the above Cyclamen seed: 250 of a variety at 1000 rate; 10,000 to 25,000 seeds, any assortment, 5%; over 25,000 seeds, 10%.

VOGT'S DOUBLE-FLOWERED STRAIN

Mixture. 100 seeds, \$3.75; 250 seeds, \$7.75; 500 seeds, \$14.50.

**PERENNIAL** (C. neapolitanum)

2500 S. 3-4 weeks 65-75°

#### NEAPOLITANUM MIXTURE

Shades of rose and white flowers about 1/3 the size of annual Cyclamen. Free flowering on 8- to 10-inch stems, in August and September. For best results sow early in fall and carry seedlings through the first winter under glass, transplanting out to partially shaded area in spring, 100 seeds, \$1.00; 500 seeds, \$3.00.

#### CYNOGLOSSUM

ANNUAL (C. amabile)

5000 S. 2-3 weeks 65-75°

AMABILE. Chinese Forget-Me-Not.

• Firmament. 18 in. Fine bushy, compact plants with freely produced small flowers of the most intense clear blue. An excellent bedding plant that stands hot, dry weather well.

Tr. pkt., 25c; ¼ oz., 45c; 1 oz., \$1.35.

Blue Bird. 2 ft. An improved, upright-growing type; rich bright blue. Tr. pkt., 20c; ¼ oz., 35c; 1 oz., \$1.15.



● DAHLIA, Unwin's Dwarf Mixture (Left)

The compact, dwarf plants produce a profusion of  $2\frac{1}{2}$ - to 3-inch double and semi-double blooms in a lavish assortment of exquisite colors. Tr. pkt., 30c;  $\frac{1}{4}$  oz., 80c;  $\frac{1}{2}$  oz., \$2.50;  $\frac{4}{2}$  ozs., \$7.50.

rog Ball

#### DAHLIA

ANNUAL (D. pinnata)

2800 S. 2-3 weeks 65-75°

Because of the wide variation in colors and types, seedling Dahlias are interesting to grow and tubers may be saved from the choicest specimens. The dwarf types are especially nice for outdoor bedding while the Unwin strain also makes a fine pot plant. All flower the first season from an early sowing. Should be sown several weeks ahead of other annuals for maximum bloom the first year.

Cactus Mixture. 3 to 4 ft. Large, double and semi-double Cactus type flowers in many colors. Tr. pkl., \$1.00; ½ oz., \$2.50; 1 oz., \$7.50.

Coltness Mixture. Dwarf and free flowering single mixture. Tr. pkt., 25c; ½ oz., 50c; 1 oz., \$1.75.

Extra Dwarf Double (New). 20 in. Double and semi-double flowers in all colors on bushy plants. Early blooming. Tr. pkt., 45c; ¼ oz., \$1.35; 1 oz., \$4.00; 4 ozs., \$12.00.

Fall Festival (Zulu). 21/2 ft. single and double flowers in shades of red with some apricot-yellow and purple. Foliage is an unusually attractive bronzy red. Tr. pkt., 30c; 1/4 oz., 80c; 1 oz., \$2.50.

Giant-Flowered Mixture. A tall-growing mixture producing 50% giant double flowers of the very best types and colorings. Must be sown early to insure blooms before frost. Tr. pkt., 60c; 1/8 oz., \$1.85; 1/4 oz., \$3.50; 1 oz., \$10.00.

Pompon Mixture. 3 ft. Medium to small double and semi-double flowers in a wide color range. Tr. pkt., \$1.00; ¼ oz., \$2.50; 1 oz., \$7.50.



#### ●UNWIN'S DWARF MIXTURE =

The compact, dwarf plants of our special strain (pictured on previous page) produce a profusion of 2½- to 3-inch double and semi-double blooms in a lavish assortment of exquisite colors. Seed

sown during January will produce salable 3- to 4-inch flowering pot plants in May.

Tr. pkt., 30c; ¼ oz., 80c; 1 oz., \$2.50; 4 ozs., \$7.50.

#### DAISY

ANNUAL

S. See below 14 days 60°

Dahlborg Daisy (Thymophylla tenuiloba). 150,000 S. 6 in. An unusually attractive, compact edging plant with airy, lace-like leaves and a profusion of small yellow flowers. Tr. pkt., 60c; ½ oz., \$1.40.

Tahoka Daisy (Machaeranthera tanacetifolia). 29,500 S. 2 ft. Single, Daisy-like flowers of lavender-blue with deep yellow centers. Tr. pkt., 30c; ½ oz., 75c; ½ oz., \$1.25; 1 oz., \$3.75.

PERENNIAL (Chrysanthemum maximum) 21,000 S. 12 days 65° SHASTA DAISY. For best results, sow in February for cut flowers the second summer. Succession crops should be sown each year. Specimen plants may be propagated by divisions.

#### G. MARCONI<sup>=</sup>

18,000 S. The largest flowered and finest double Shasta Daisy strain from seed. Long-stemmed.

Tr. pkt., 55c; ½ oz., \$1.65; ½ oz., \$3.00; 1 oz., \$9.00.

Double Fringed (Diener's). 24,000 S. A reselected strain producing about 50% double types that should be propagated by division. Tr. pkt., 55c; ½ oz., \$1.65; ¼ oz., \$3.00; 1 oz., \$9.00.

• Alaska. The standard Shasta Daisy. July. Tr. pkt., 25c; ¼ oz., 50c; 1 oz., \$1.50.

Blue Daisy. See Agathea, page 3.

English Daisy. See Bellis, page 9.

Gloriosa Daisy. See Rudbeckia, page 46.

Painted Daisy. See Pyrethrum, page 46.

#### **DATURA**

ANNUAL (D. species)

2-3 weeks 65-75°

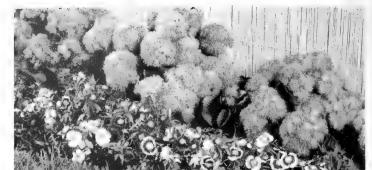
White Tower (D. suaveolens). 870 S. 5 ft. Huge, fragrant, snowy trumpet-like flowers up to a foot in length. Very spectacular when well grown. Germinates slowly and needs heat. Tr. pkt., 75c; ½ oz., \$2.00; 1 oz., \$6.00.

Wrighti (Angel's Trumpet). 2500 S. 3 ft. Large, white, tinted orchid flowers. Tr. pkt., 30c; 1/4 oz., 65c; 1 oz., \$2.00.

#### DELPHINIUM

See page 20.

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DIANTHUS, WEE WILLIE An extra dwarf Dianthus, fine for edging. Shown here with Ageratum, Blue Mink.

#### DIANTHUS

ANNUAL (D. chinensis)

25,000 S. 2-3 weeks 65-75°

• Sweet Wivelsfield Single Mixture. 12 in. Probably the most popular of the annual Dianthus. Free flowering and brilliantly colored.

Tr. pkt., 15c; ¼ oz., 35c; 1 oz., \$1.00.

Sweet Wivelsfield Double Mixture. Most flowers either semi-double

or double. Tr. pkt., 30c; ¼ oz., 70c; 1 oz., \$2.25.

Westwood Beauty (D. Heddensis). Pleasing 2-inch, single flowers in shades of red on long stems. Somewhat more resistant to heat than ordinary Dianthus. Tr. pkt., 30c; 1/4 oz., 60c; 1 oz., \$2.00.

HEDDEWIGI (Double Pinks). 10 in.

● Double Gaiety. Brilliant shades in a full range of colors, including bright salmon and scarlet. Tr. pkt., 35c; ¼ oz., 75c; 1 oz., \$2.50. Wee Willie. 3 in. An extra dwarf Dianthus in shades of red. Must be planted close together for good effect. Makes a fine display in flats or for combination use, blooming in 6 to 8 weeks from sowing. Tr. pkt., 60c; ¼ oz., \$1.80; 1 oz., \$5.40.

PERENNIAL (D. species)

28,000 S. 2-4 weeks 65-75°

Easily grown from seed with flowers from May to July the second season from sowing.

Allwoodi Alpinus Mixture. 8 to 10 in. 1½-inch single flowers in shades of pink. Early June. Tr. pkt., 35c; 1/8 oz., \$1.00; 1/4 oz., \$1.75.

#### DELTOIDES ERECTA

6 in. May-June flowering. A dwarf rose "Maiden Pink." A fine substitute for creeping. Phlox for rock gardens and borders. Tr. pkt., 35c; ½ oz., \$1.00; ½ oz., \$1.75.

Latifolius Atrococcineus. 38,000 S. Clusters of bright crimson flowers on individual 12- to 15-inch stems. Fine for cutting May-June. Tr. pkt., 35c; ½ oz., \$1.00; ½ oz., \$1.75; 1 oz., \$5.25.

Loveliness. 15 in. Large, fringed and curled pastel and white flowers. Quite fragrant. Originator's seed.

Tr. pkt., 80c;  $\frac{1}{16}$  oz., \$2.50;  $\frac{1}{4}$  oz., \$7.50. Winteri. 16,400 S. Large, single flowers in a mixture of pure colors. Long blooming period. June-July. Tr. pkt., 60c; ½ oz., \$1.50; ½ oz., \$5.00.

PLUMARIUS (Clove Pink)

Spring Beauty, Double Mixture (Scoticus). Various shades of pink, rose and white, some self colors, others with bright crimson zone. 1½-in. flowers on 12- to 15-inch stems.

Tr. pkt., 35c; ½ oz., \$1.00; ¼ oz., \$1.75; 1 oz., \$5.25.

BARBATUS (Sweet William). 18 in. Early June flowering. Perfectly hardy, flowering second season from seed. All varieties listed are single except where noted.

● Auricula. Choice mixture of very large flowers with clearly defined

Dark Crimson. A smooth, velvety color.

Giant White. Ours is an extra large flowered strain.

Holborn Glory. Striking combination of crimson center with white border. Very uniform.

• Newport Salmon (Pink Beauty). A particularly rich pastel salmonrose shade. Very attractive.

Purple Beauty. A rich, deep color. Scarlet Beauty. Well named, intense scarlet-red.

• Double Mixture.

Single Mixture.

Prices above 9, each: Tr. pkt., 35c; ¼ oz., 75c; 1 oz., \$2.60.

Double Midget Crimson. 6 to 8 in. A separate color selected from the popular Double Midget Mixture. True to type.

Tr. pkt., 50c; ¼ oz., \$1.50; 1 oz., \$4.50. • Double Midget Mixture. 6 to 8 in.

Tr. pkt., 40c; ¼ oz., 90c; 1 oz., \$3.00.

• Single Midget Mixture. Very fine, neat alpine and rock plant. 4 to 6 in. with dense heads of single Sweet William flowers. Tr. pkt., 60c; 1/4 oz., \$1.50; 1 oz., \$4.75.

The dot (●) indicates varieties most dependably satisfactory in our experience and observation.

#### DICENTRA

FERENNIAL (D. species)
S. See below Frost germinator
Spectabilis (Bleeding Heart).
6000 S. 3 ft. Rosy red flowers.
Tr. pkt., \$1.50; ½ oz., \$4.50.

**Eximia** (Plumy Bleeding Heart), 16,000 S. Dwarf, 12 in. Rose-pink. Tr. pkt., **50c**; ¼ oz., \$1.50; 1 oz., \$4.50.

#### **DICTAMNUS**

PERENNIAL (D. fraxinella)
1700 S. Frost germinator
Must be exposed to freezing temperatures for normal germination.

Fraxinella (Gas Plant).  $2\frac{1}{2}$  ft. Pink with dark veins. Tr. pkt., 30c;  $\frac{1}{4}$  oz., 75c; 1 oz., \$2.25.

#### **DIDISCUS**

ANNUAL (Trachymene caerulea) 10,000 S. 2-3 weeks 65-75° 24 to 30 in. Useful for spring forcing, or outdoors in cool climates.

Blue Lace (Caeruleus). Small heads of light lavender flowers in sprays. Tr. pkt., 30c; ¼ oz., 80c; 1 oz., \$2.40.

**Lace Veil.** A pure white form of the above. Tr. pkt., **35c**; ½ oz., **\$1.00**; 1 oz., **\$3.00**.

**Pink Lace.** Like the above but pale pink in color if grown in shade. Tr. pkt., 35c;  $\frac{1}{4}$  oz., \$1.00; 1 oz., \$3.00.

#### **DIGITALIS** (Foxglove)

#### PERENNIAL

(D. purpurea gloxiniaeflora) 180,000 S. 2-3 weeks 65-75° 4 ft. Biennial. This is an extra large flowered strain.

• Excelsior. This unusually fine Foxglove carries its flowers at right angles to the stem rather than drooping downward as other types do. This feature reveals the full effect of the markings inside each flower. All colors are represented in this complete mixture. Tr. pkt., 45c; ½ oz., \$1.25; 1 oz., \$3.75.

Purple (Dark Red) White Rose Giant Shirley Mixture Prices above 4, each: tr. pkt., 35c; ½ oz., \$1.00; 1 oz., \$3.00.

#### **DIMORPHOTHECA** (Cape Marigold)

**ANNUAL** (D. aurantiaca) 9500 S. 2-3 weeks 65-75° 6 to 10 in. A very attractive bedding plant.

• Aurantiaca Mixture. 2-inch, single, Daisy-like flowers in bright yellow, buff and orange shades. Tr. pkt., 25c; ½ oz., 60c; 1 oz., \$1.80.

Glistening White. Large, Daisy-like flowers with black eyes, edged violet. Spreading plants. Tr. pkt., 40c; ½ oz., \$1.00; 1 oz., \$3.25.

#### **DORONICUM** (Leopards-Bane)

PERENNIAL (D. caucasicum) 18,000 S. 2-3 weeks 65-75° Caucasicum, Magnificent. 2 ft. Large, yellow, Gerbera-like flowers with long stems. Keep well when cut. Tr. pkt., \$1.00; ½ oz., \$2.25; ½ oz., \$6.75.

#### DRACAENA

ANNUAL (D. species)

1500 S. 5-7 weeks 65-75°

DIGITALIS, EXCELSIOR

Unusually fine Foxglove.

Indivisa. In the hull. (D. lineata). The narrow-leaved and most popular variety. Tr. pkt., 20c; 1 oz., 55c; 4 ozs., \$1.65.

Indivisa. Cleaned. (D. lineata). 10,000 S. Hulled seed. Tr. pkt., 35c; ¼ oz., \$1.00; 1 oz., \$3.00.

**Australis.** 1000 S. The broader-leaved kind. Tr. pkt., **20c**; ¼ oz., **35c**; 1 oz., **\$1.00**.

Dusty Miller. See Cineraria, page 16, and Centaurea, page 13.

#### **ECHINOPS** (Globe Thistle)



#### PERENNIAL

650 Seed Heads Per Oz.

65-75

Ritro. Metallic blue flower heads  $1\frac{1}{2}$  to 2 in. across are borne on 2-to 3-ft. plants. Can be dried for winter bouquets. Tr. pkt., 40c;  $\frac{1}{4}$  oz., \$1.10; 1 oz., \$3.25.

#### **EREMURUS** (Desert Candle)

**PERENNIAL** (E. rebustus)

1400 S. Frost germinator

Robustus (Foxtail Lily). 8 ft. Huge, 3-ft. spikes of bright rose-pink. Blooms in 3 years from seed. Tr. pkt., \$1.00; ½ oz., \$3.50.

#### **EUPHORBIA**

**ANNUAL** (E. species)

S. See below 1-2 weeks 65-75°

Variegata (Snow-on-the-Mountain), 2500 S. 2 ft. Green leaves with white edges. Tr. pkt., 30c; 1 oz., 90c; 4 ozs., \$3.00.

Heterophylla (Annual Poinsettia or Mexican Fire Plant), 5000 S. 3 ft. Upper leaves blotched with red. Tr. pkt., 35c; ¼ oz., \$1.00; 1 oz., \$3.00.

PERENNIAL (E. species)

S. See below 4-5 weeks 65-75°

Myrsinites. 2500 S. 6 to 8 in. Attractive succulent-like silvery green foliage. Each branch produces a brilliant yellow bract of leaves in May. Tr. pkt., 35c; ½ oz., \$1.00; ½ oz., \$3.00.

**Polychroma.** 7000 S. 15 to 18 in. Bushy plants with bracts of bright yellow changing to rosy bronze. Tr. pkt., 60c; ½ oz., \$1.80; ½ oz., \$5.40.

#### **EXACUM**

ANNUAL (E. affine)

1,000,000 S. 2-3 weeks  $65-75^{\circ}$ 

● Affine. An excellent summer pot plant with richly fragrant violet-blue flowers. A December-January sowing with 3 to 5 seedlings in a 4- or 5-inch pot will make fine plants for summer sales. Shade glass during hot weather. Tr. pkt., \$1.25; ½28 oz., \$3.00; ½4 oz., \$5.50.

#### **FEVERFEW**

See Matricaria, page 27.

#### FREESIA

ANNUAL (F. hybrida) 3000 S. 3 weeks 65° Freesias are enjoying renewed popularity today, due to the fine new seed strains which make it possible to grow good cut flowers from seed. Seed sown in early spring will produce bulbs by September. These will bloom the following winter. Soak seed 24 hours before sowing.



FREESIA, SUPER GIANTS

SUPER GIANTS. The most choice strain, im-

ported from a European specialist. Large flowers and long stems.

White Blue and Lilac Shades Red and Pink Shades Yellow and Orange Shades Mixture

Prices above 5, each: tr. pkt., 1.00; 1/8 oz., 2.25; 1/2 oz., 7.50.

Refracta alba. White. Tr. pkt., 60c; 1/4 oz., \$1.35; 1 oz., \$4.00.

• Rainbow Mixture. Attractive mixture of blues, yellows and reds. Tr. pkt., 75c; ½ oz., \$1.50; ¼ oz., \$2.75; 1 oz., \$8.25.

#### **FUCHSIA**

ANNUAL (F. hybrida)

70,000 S. 4-6 weeks 65-75

**Special Mixture.** A choice mixture of single and double types saved from one of the finest collections in the country. 350 seeds, **\$3.00**; 700 seeds, **\$5.50**; 1400 seeds, **\$10.00**.



GIANT PACIFIC DELPHINIUM Cameliard, Summer Skies, Black Knight, and Guinevere

#### OTHER VARIETIES

(All California-grown seed)

• Belladonna Imp. (Cliveden Beauty). Popular light blue. Tr. pkt., 40c; ½ oz., \$1.25; 1 oz., \$3.75; 4 ozs., \$12.50.

• Bellamosum Improved. Standard deep blue.

Tr. pkt., 40c; ¼ oz., \$1.25; 1 oz., \$3.75; 4 ozs., \$12.50. Lamartine. Deep, bright marine-blue with white eye.

Tr. pkt., 55c; ¼ oz., \$1.50; 1 oz., \$5.00.

Blackmore and Langdon Strain. Shades of blue with contrasting bees. A good free-flowering mixture. Tr. pkt., 40c; ¼ oz., \$1.25; 1 oz., \$3.75; 4 ozs., \$12.50.

• Sapphire. Large flowered bright blue with small golden bee. Petals have a brilliant, glossy sheen. Slightly lighter than Bellamosum. Tr. pkt., 75c; ½ oz., \$2.00; 1 oz., \$6.00.

Wrexham or Hollyhock Strain. Extra large, tapering spikes. Tr. pkt., 55c; ¼ oz., \$1.75; 1 oz., \$6.00.

Gold Medal Mixture. Tr. pkt., 35c; ¼ oz., \$1.00; 1 oz., \$3.00. Cardinale. 25,000 S. Bright scarlet.

Tr. pkt., 40c; 1/4 oz., \$1.20; 1 oz., \$3.60.

## Delphinium

PERENNIAL (D. elatum)

10,000 S. 3-4 weeks 55-65°

If Delphinium seed is sown in January or early February, transplanted in the greenhouse and planted out in early spring, a good cut can be had the same summer with excellent production the following season.

#### GIANT PACIFIC STRAINS **Court Series**

• Black Knight. Deep velvety blue. The darkest of all.

• Blue Bird. The clearest of medium blues; white bees. Blue Jay. A brilliant true medium blue with dark bee. Cameliard. Lavender and rose with white bee.

• Galahad. The finest clear white Delphinium.

• Guinevere. Excellent, light pinkish lavender; white bee.

• King Arthur. Royal violet with white bee. Exceptional size.

• Summer Skies. Light blue with contrasting white bee. • 6 Best Mixture. Formula mixture of the "6 Best" varieties.

Round Table. Contains all above plus many new colors.

Prices of above:

Originator's Seed (Vetterle and Reinelt). An excellent strain of the Giant Pacifics kept uniform and vigorous by the originator. ½ tr. pkt., \$1.25; tr. pkt., \$2.00; ½ oz., \$3.00; ¼ oz., \$5.50; 1 oz., \$20.00.

Regular Seed. A satisfactory strain one generation removed from originator's seed. Grown by a reliable seed producer.

Tr. pkt., \$1.50;  $\frac{1}{8}$  oz., \$2.50;  $\frac{1}{4}$  oz., \$4.50; 1 oz., \$15.50.

Pale blush shades with several darker tones including a few raspberry-rose. Dark bees. ½ tr. pkt., \$1.25; tr. pkt., \$2.00; ½ oz., \$3.00; ¼ oz., \$5.50; 1 oz., \$20.00.

#### GIANT PACIFIC REGULAR STRAIN

Clear White. A fine clear white, large flowered.

Blue Shades. Mixture of light, medium and dark blue.

Lavender Pastel Shades. Lavender combinations with dark bees.

Mixture. All colors in this fine type. Prices above 4, each: tr. pkt., \$1.25; ½ oz., \$2.25; ¼ oz., \$4.00; 1 oz., \$13.50.

#### **OUR "6 BEST" GIANT PACIFICS**

Galahad Blue Bird

Summer Skies King Arthur

Black Knight Guinevere

COLLECTIONS:

Originator's Seed. 1 tr. pkt. each of 6 Best, \$10.80. Regular Seed. 1 tr. pkt each of 6 Best, \$8.00.

ANNUAL (D. grandiflorum) 20,000 S. 2-3 weeks 60-70° DELPHINIUM CHINENSIS. Sow several weeks before most bedding plants for good bloom. Often winters over.

• Blue Mirror. 2 ft. Bright navy-blue flowers without spurs.

Tr. pkt., 55c; 1 oz., \$1.25; 1 oz., \$3.75.

• Cambridge Blue. The standard Belladonna blue variety. Tr. pkt., 30c; ¼ oz., 90c; 1 oz., \$2.70. Mixture. Tr. pkt., 30c; ¼ oz., 90c; 1 oz., \$2.70.

### GROW FOLIAGE PLANTS FROM BALL SEED -

#### ADIANTUM (Maidenhair Fern)

#### ANNUAL

Ocean Spray. A sturdier growing form of this popular Fern. Fine for pots and combinations or for cutting, and easily grown from seed (spores). Full growing instructions with each order. Tr. pkt., \$1.75.

ASPARAGUS. See page 9.

DRACAENA. See page 19.

#### FICUS ELASTICA (Rubber Plant)

ANNUAL (F. elastica)

14 days

Ficus Elastica (New Decora strain with reddish stems and under leaves). Now you can grow this popular "Rubber Plant" from seed, producing salable 4-inch plants in 6 months. Germinates about 40% in 75°. Keep flats exposed to light—do not cover with paper. 300 seeds, \$4.50.

#### JACARANDA

ANNUAL

Mimosaefolia. A foliage plant of value for its graceful fern-like leaves-useful in all stages of growth and easy to grow from seed. In conservatories, will develop into trees with beautiful violet flowers, as seen outdoors in southern California. 100 seeds, 60c; 500 seeds, \$2.50.



ANNUAL (Collinea elegans)

180 S. 3-6 months

Chamaedorea Elegans (Neantha Bella). A miniature Palm from South America. Dwarf and graceful, and grows more rapidly than Kentia after germination. Requires less than 5 months at 70°. Use a friable sandy loam mixed with peat in potting. 1 oz. (about 200 seeds), \$1.50; 4 ozs., (about 800 seeds), \$5.00.

PALM

#### GAILLARDIA

ANNUAL (G. species)

14,000 S. 2-3 weeks 65-75°

PICTA. Brightly colored, popular plants for beds and borders. The taller varieties make useful summer cut flowers.

#### • SUNSHINE DOUBLE MIXTURE

2 ft. Fully double flowers about  $2\frac{1}{2}$  in. across are carried on strong stems 16 to 18 in, long, Attractive shades of wine-red, yellow and bicolor red and yellow. Good for summer cut flowers. Tr. pkt., 30c; 1/4 oz., 70c; 1 oz., \$2.40.

Lorenziana Double Mixture. 12 in. Quite attractive and free flowering double strain of orange, yellow, red and rose shades. Tr. pkt., 20c; ¼ oz., 50c; 1 oz., \$1.50.

• Red Giant. 2 ft. 21/2-inch single flowers of solid, bright coppery red are produced in abundance on vigorous, bushy plants. Tr. pkt., 30c; ¼ oz., 90c; 1 oz., \$2.70.

9500 S. 2-3 weeks 65-75° **PERENNIAL** (G. grandiflorum) GRANDIFLORA. The following strains, except Goblin, are excellent cut flower sorts.

- Dazzler. The standard fine cutting strain. Golden yellow with maroon center.
- Monarch Strain. A superior mixture of large, full-petaled flowers in various red and yellow combinations.

Prices above 2, each: Tr. pkt., 30c; 1/4 oz., 55c; 1 oz., \$1.85.

**Burgundy.** Deep shade of wine-red. Tr. pkt., **30c**; ½ oz., **75c**; 1 oz., **\$2.35**.

Goblin. Forms very attractive, compact plants with red and yellow bicolored flowers. Quite free flowering. Tr. pkt., 25c; ¼ oz., 75c; 1 oz., \$2.35.

Gas Plant, See Dictamnus, page 19.

#### GAZANIA

ANNUAL (G. splendens)

12,000 S. 3 weeks

Splendens Grandiflora Mixture. 8 in. Daisy-like flowers, mostly orange, with shades of yellow and white. The vigorous plants are constantly in bloom. Stands hot, dry weather well. Tr. pkt., 50c; ½ oz., \$1.50; 1 oz., \$4.50.

#### GERANIUM

ANNUAL (Pelargonium zonale hyb.) 6000 S. 4-6 weeks 55-65° Easily grown from seed, but should be sown early for summer blooms.

Florist Mixture. Extra large flowered singles. American-grown. 500 seeds, \$1.75; 2000 seeds, \$5.25.

Zonale. A single mixture of white, pink, salmon and red. Tr. pkt., 50c; ¼ oz., \$2.00; 1 oz., \$6.00.

GERBERA (Transvaal Daisy)

ANNUAL (G. Jamesoni)

8000 S. 2-3 weeks 65-75°

Duplex Mixture. 2-21/2 ft. This splendid strain produces large, 5-inch flowers with twice as many petals as the ordinary single type. All colors except blue, are represented with flowers being carried on long, strong stems. 100 seeds, 65c; 1000 seeds, \$5.50; 5000 seeds, \$25.00.

#### GESNERIA

ANNUAL (C. macrantha)

650,000 S. 3 weeks 65-75°

Macrantha. The Gloxinia-like leaves of this attractive pot plant are crowned with an upright central stem bearing many slender, tubular, brilliant scarlet flowers. Sow January to March for late fall and Christmas plants. Keep shaded during summer. Tr. pkt., \$1.25.

#### GEUM

PERENNIAL (G. varieties)

7000 S. 3-4 weeks 65-75°

The following two provide nice cut-flower material and are perfectly winter hardy with some protection.

Lady Stratheden. 2 ft. Double golden yellow.

Mrs. Bradshaw. 2 ft. Double glowing red.

Prices above 2, each: tr. pkt., 30c; 1/4 oz., 90c; 1 oz., \$2.70.

#### **GLADIOLUS**

ANNUAL (G. hortulanus)

5500 S. 2 weeks 65-75°

Color Cavalcade. A wonderful assortment of colors from hand-pollinated crosses. If seed is sown in fall, bulblets may be harvested in March and replanted in May to be harvested in fall as blooming size bulbs for following spring planting. 250 seeds, \$1.00; 1000 seeds, \$3.00.



GLOXINIA. PANZER SCARLET

#### GLOXINIAS

ANNUAL (Sinningia speciosa)

800,000 S. 2-3 weeks 65-75°

Gloxinias are easy to grow from seed. A December sowing (70° and no covering for best germination), carried along at 65° during the winter will make fine, salable, 4- and 5-inch blooming plants in June, Suggest potting mix of 2/3 light organic soil and 1/3 sand. Shade lightly in winter, more heavily in bright months, and water with care never to let them dry out. 21/4-in. Jiffy-Pots are fine for first transplanting.

#### • PANZER SCARLET Originator's Seed

Pictured above. This deep, bright velvety red is the color in Gloxinias. The originator's strain has been reselected and is now offered with assurance that it has no peer in commercial Gloxinia seed strains. Full cultural directions sent with each packet. Tr. pkt., \$3.00; 5 tr. pkts., \$13.50.

Tigered and Spotted. Very attractive mixture of colors.

Tr. pkt., \$1.25; 6 pkts., \$6.00.

• Formula Mixture. Made up of choice named separate color varieties. All colors are represented including bicolors and spotted types. Tr. pkt., \$1.25; 6 pkts., \$6.00.

Scarlet (Etoile de Feu) Violet (Prince Albert)

Violet and White (Emp. William)

White (Mont Blanc)

Rose Sensation

Scarlet and White (Emp. Frederick)

Dark Pink (Queen Wilhelmina)

Prices above 7, each: tr. pkt., \$1.25.

**COLLECTION** of 1 tr. pkt. each above 7 separate colors, \$7.50.

#### Imported Flexible-Leaved Strain

This new strain is reported by its originator to have softer and more flexible leaves than the ordinary type, permitting it to be handled and packed without danger of leaf breakage.

Blood-Red

Prices above 2, each: tr. pkt., \$2.00; 1/128 oz., \$6.00.

Gloriosa Daisy. See Rudbeckia, page 46.







BE SURE TO INCLUDE ALL OF THE SWEET SIXTEEN VARIETIES ON YOUR SPRING SEED LIST THIS YEAR



#### **GOMPHRENA**

(Globe Amaranth)

ANNUAL (G. globosa)

5500 S. 2-3 weeks 65-75°

GLOBOSA. A very showy garden flower, and the taller varieties have value for cutting. Can be dried for winter bouquets. Does exceptionally well in hot, dry locations but is "at home" almost anywhere. Better try some Gomphrena if you've never grown it.

Rubra. 18 in. One-inch, ball-shaped flowers of bright reddish purple.

Orange. 2 ft.

Pink. 2 ft.

Mixture of purple, silvery white, pink and orange.

Prices above 4, each: tr. pkt., 30c; \( \frac{1}{4} \) oz., 50c; \( 1 \) oz., \( \$1.50. \)

• Buddy. 9 in. Fairly dwarf plants with small, ball-shaped flowers of bright reddish purple. This is the true dwarf strain. Fine for bedding, pot plants or combination boxes.

Tr. pkt., 60c; ¼ oz., \$1.00; 1 oz., \$3.00.

Cissy. 9 in. The same dwarf, compact habit of growth as Buddy, but with silvery white flowers, Tr. pkt., 60c; ¼ oz., \$1.00; 1 oz., \$3.00.

• Dot 'N Dash. The two dwarf Gomphrenas, Buddy and Cissy, mixed. Plant this for a really striking contrast.

Tr. pkt., 60c; ¼ oz., \$1.00; 1 oz., \$3.00.

#### GOURDS, ORNAMENTAL

500 S. 2-3 weeks 65-75° ANNUAL SMALL VARIETIES. All are easily grown and, when properly dried and varnished, last indefinitely.

Spoon. Orange and green fruits with long, slender necks.

Warted Types, Mixture. Not over 4 in. in diameter.

Small Varieties, Mixture. Attractive assortment.

Prices above 3, each: tr. pkt., 25c; 1 oz., 90c.

See page 62 for Halloween Pumpkins.

#### GRASS, ORNAMENTAL

14.500 S. 30 days ANNUAL (Pennisetum ruppelianum)

Pennisetum ruppelianum (Fountain Grass). 3 to 4 ft. Long, graceful, purple sprays. A very striking background plant. Tr. pkt., 35c; ¼ oz., \$1.00; 1 oz., \$3.00.

#### **GREVILLEA**

ANNUAL (G. robusta)

3000 S. 2-3 weeks  $65-75^{\circ}$ 

Robusta (Australian Silk Oak). Good foliage plant. Stands heat well, tolerates sun and shade, holds foliage. August and September sowings grown at 60° produce good 2½-in. pots for winter sales. Tr. pkt., 40c; ¼ oz., \$1.35; 1 oz., \$4.00.

#### **GYPSOPHILA**

ANNUAL (G. elegans)

24,000 S. 2-3 weeks 65-75°

ELEGANS. Easily flowered in flats in the greenhouse or may be grown outdoors; requires about 3 months to bloom from sowing. Although the larger flowered varieties are attractive and fine, the smaller ones outlast them for bouquet work.

Carminea. Small, 1/4-in. pink flowers. Tr. pkt., 15c; 1 oz., \$1.20; 4 ozs., \$4.00.

- Covent Garden Market. A very excellent strain with large and full-petaled white flowers, about 15% of which have 6 to 8 petals. 1 oz., 30c; 4 ozs., 75c; 1 lb., \$2.50; 5 lbs., \$10.00.
- Paris Market. Smaller flowered than Covent Garden Market, Used extensively in southern states for winter blooming. Holds up well. 1 oz., 30c; 4 ozs., \$1.20; 1 lb., \$3.60.

PERENNIAL (G. species) 34,000 S. 1-2 weeks 65-75°

Valuable for outdoor summer cutting; easily and economically grown.

• Pacifica. 3 ft. Starry pink flowers in September and October.

Tr. pkt., 40c; ½ oz., \$1.25; 1 oz., \$3.75.

PANICULATA (Baby's Breath). The regular white hardy Gypsophila. Note that double grafted varieties like Bristol Fairy are not available

• Double Snow Flake. 3 ft. An improved double hardy Gypsophila. About 50% are double flowering plants

Tr. pkt., 50c; ¼ oz., \$1.50; 1 oz., \$5.00.

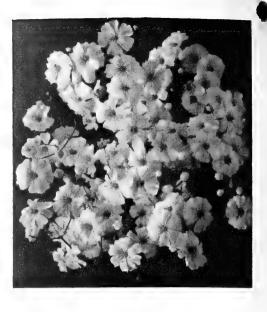
Single White. 3 ft. Tr. pkt., 25c; 1 oz., \$1.00; 4 ozs., \$3.00.

REPENS. 6 in. An attractive, hardy rock garden plant.

Rose. Tr. pkt., 45c; \(\frac{1}{4}\) oz., \$1.35; \(\partial\) oz., \$3.90.

**GYPSOPHILA** COVENT GARDEN MARKET

A very excellent strain with large and full-petaled white



#### **HELIANTHEMUM** (Sun Rose)

PERENNIAL (H. nummularium)

15,000 S. 2-3 weeks 65-75°

Mutabile. 8 to 10 in. Very attractive, dwarf, evergreen rock plants completely covered with blooms in mixed colors during July and August. Tr. pkt., 35c; ¼ oz., 60c; 1 oz., \$1.80.

#### **HELIANTHUS** (Sunflower)

ANNUAL (H. annuus)

650 S. 2-3 weeks 65-75°

• Sungold. 4 to 5 ft. Practically 100% fully double, golden yellow Chrysanthemum-like flowers about 4 in, across, Makes a good cut flower. Sow outdoors in May for August blooming.  $\frac{1}{4}$  oz., 40c; 1 oz., \$1.20; 4 ozs., \$4.00.

#### **HELICHRYSUM** (Everlasting)

ANNUAL (H. bracteatum monstrosum) 36,000 S. 2-3 weeks 65-75° The most popular double Strawflower. Widely used for drying.

Formula Mixture. Tr. pkt., 25c; 1/4 oz., 40c; 1 oz., \$1.40.

#### HELIOTROPE

ANNUAL (Valeriana officinalis)

50,000 S. 3-4 weeks 65-75°

Heliotropes do best in heat and rich soil.

Dwarf Regale Mixture. 15 in. A fine, even strain with extra large, lavender-violet flower heads. Richly fragrant. Tr. pkt., 40c; ¼ oz., \$1.00; 1 oz., \$3.25.

• Marine. Excellent large flowered, deep violet. Originator's seed. Tr. pkt., 55c; ½6 oz., \$1.60; ¼ oz., \$4.80.

#### **HELLEBORUS**

PERENNIAL (H. niger)

3600 S. Frost germinator

Niger (Christmas Rose). Attractive, 2½-in. white flowers; basal foliage. Seed should be frozen before sowing or sown outdoors in fall for best results. Tr. pkt., 70c; ¼ oz., \$1.20; 1 oz., \$3.60.

Choice Mixture. Large flowered, white, lavender and rose. Tr. pkt., \$1.10; ¼ oz., \$2.00; 1 oz., \$6.00.

#### **HEUCHERA** (Coral Bells)

PERENNIAL (H. sanguinea) 750,000 S. 2-3 weeks 65-75° Small, cup-shaped flowers borne in slender panicles. 2 ft.

Splendens. Crimson.

Mixture. Shades of red through rose to white.

Prices above 2, each: tr. pkt., 60c; 1/16 oz., \$1.75; 1/8 oz., \$3.25.

#### HIBISCUS

PERENNIAL (H. species)

7000 S. 2-3 weeks 65-75°

Large, showy, tropical flowers. Needs moisture.

Mallow Marvels Mixture. 4 ft. Well balanced color range. Flowers first year. Tr. pkt., 30c; 1/4 oz., 90c; 1 oz., \$2.60.

• Avalon. 5 ft. This is an exceptional mixture of genuine F2's with colors ranging from blush-pink to bright red. The blooming period (early July to late September) is much longer and the flowers larger than the regular Mallow Marvels. Tr. pkt., 35c; ¼ oz., \$1.00; 1 oz., \$3.00.

#### HOLLYHOCK

ANNUAL (Althaea rosea) 2000 S. 2-3 weeks 70-80° Plants should be banded or Jiffy-Potted early before tap roots grow

• Indian Spring. 4 to 5 ft. Starts to bloom 5 months from seed sowing and continues until frost. Semi-double, light pink and rose flowers are borne mostly on central spikes. Tr. pkt., 45c; ½ oz., 80c; 1 oz., \$2.40.

PERENNIAL (Althaea rosea) 3000 S. 2-3 weeks 65-75° 6 to 8 ft. Popular and well known perennial.

Imperator Improved. Choice double crested "Tuberous Begonia-Flowered" mixture. Tr. pkt., 35c; ¼ oz., 65c; 1 oz., \$2.00.

#### TRIUMPH SUPREME

Extra large, fully double flowers in unusual, delicate art shades. Most blooms are attractively fringed. May be handled as an annual-if sown indoors in February and transplanted to the open in spring, all plants will flower nicely the same summer. Tr. pkt., 55c; ¼ oz., \$1.00; 1 oz., \$3.00.

CHATER'S DOUBLE. The standard double.

Newport Pink Sulphur-Yellow Scarlet White Deep Rose Mixture

Prices above 6, each: tr. pkt., 35c; 1/4 oz., 65c; 1 oz., \$2.00.

#### **HUNNEMANNIA** (Bush Escholtzia)

ANNUAL (H. fumariaefolia)

8000 S. 2-3 weeks 65-75°

Sunlite. 2 ft. Brilliant canary-yellow, semi-double.

Tr. pkt., 25c; 1/4 oz., 50c; 1 oz., \$1.75.

#### **IBERIS** (Hardy Candytuft)

PERENNIAL (I. species)

11,500 S. 2-3 weeks 65-75°

Plants flower second season from seed.

Gibraltarica. 12 in. Large flowered lilac. Tr. pkt., 25c;  $\frac{1}{4}$  oz., 50c; 1 oz., \$1.50.

Sempervirens. 12 in. White flowers in late May. Needs ample moisture. Tr. pkt., 55c; ¼ oz., \$1.35; 1 oz., \$4.75.

#### HIBISCUS. **AVALON**

This is an exceptional mixture of genuine F2's with colors ranging from blush-pink to bright red.



#### **IMPATIENS**

See page 24.

#### IPOMOEA

See Morning Glory and Moonflower, page 30.

#### INCARVILLEA

PERENNIAL (I. species)

6000 S. 2 weeks 65-75°

Funnel-shaped flowers borne in clusters.

Grandiflora Brevipes. 18 in. Brilliant crimson-rose flowers.

Delavayi. 2 ft. Large, Gloxinia-like rosy purple flowers.

Prices above 2, each: tr. pkt., 60c; ½ oz., \$1.80; 1 oz., \$5.40.

#### IRIS

PERENNIAL (I. species)

7000 S. Frost germinator

Plants bloom second season from seed.

Dichotoma (Vesper Iris). 2 ft. Assorted colors; fragrant. Tr. pkt., 45c; 1/4 oz., \$1.30; 1 oz., \$3.90.

Kaempferi (Japanese Iris). 2 ft. A wide variety of colors with many doubles. Tr. pkt., 40c; ¼ oz., 75c; 1 oz., \$2.35.



### Pano-drench — a most effective control for damp-off

Many growers have reported their findings on the use of Pano-drench to control damp-off and certain other diseases in flower pots, seed flats, propagating benches, stock benches, etc. The results were remarkable, as indicated by comments at right.

Pano-drench is used as a pre-emergence or postemergence drench—two teaspoons to three gallons of water-and is applied with an ordinary sprinkling

Easy to use, Pano-drench can end your damp-off problems, control diseases like stem rot and root rot.

Order your Pano-drench today. 1-oz. bottle, \$1.95; 4-oz. bottle, \$5.95; 16-oz. bottle, \$19.20. Net, prepaid.

#### **COMMENTS FROM USERS**

We use Pano-drench and have had remarkable success. We use no other sterilizing medium and have cut damp-off to almost zero. Please rush my order."—Wisconsin,

"Your product was recommended to me by the Citrus Experimental Station at Riverside, and is everything you say it is. It has made me a cool \$1,000 this spring."—California.

"Never saw so many Snapdragon seedlings in my life. Especially good on Peppers as it has been a long time since I have seen flats develop 104 plants when I put in that many seedlings."—Washington.

"Flats of Australian Pine seed treated with Pano-drench came up almost 100%. Another flat, untreated, germinated only about 50%. —Florida.

"Pano-drench actually stopped damping-off already well advanced in a flat of Petunia seedlings."—Oregon.



IMPATIENS, DWARF BRIGHT ROSE



IMPATIENS, PIXIE WHITE (Above)

#### IMPATIENS, DWARF BRIGHT ORANGE (Below)



### Impatiens "SULTANAS"

ANNUAL (1. holstii and sultanii hybrids)

66,000 S. 2-3 weeks 65-75°

We consider Impatiens the finest of all shade loving annuals. Under these conditions the

dwarf varieties attain approximately the size of bedding Petunias. They are covered with blossoms of intense color that possess a luminous sheen seldom equalled in any bedding plant. Here's the answer to those customers who want something for "that shady spot."

It's important for most bedding purposes to confine your use to the dwarf strains which retain much better plant habit in late stages of growth. Impatiens tolerate a wide range of temperature and will grow well with most spring subjects. Try them from seed—one of the few annual subjects which can be depended upon to produce an abundance of colorful blooms throughout the summer in shade. Dwarf varieties also make appealing pot plants in 3's or 4's.

DWARF, 6 to 8 inches.



#### DWARF MIXTURE

Bright mixture of dwarf varieties including above colors and other shades. Excellent for shade bedding.

Tr. pkt., \$1.00;  $\frac{1}{32}$  oz., \$3.00;  $\frac{1}{16}$  oz., \$5.75;  $\frac{1}{8}$  oz., \$10.50.

• Dwarf Bright Rose. A luminous shade of deep rose. Compact and free flowering.

Blaze. Bright scarlet-orange with contrasting dark foliage. Dwarf, spreading growth.

Pinkie. Large flowers of bright coral-rose with salmon cast. This is an entirely new color in dwarf Impatiens.

Pink Sprite (New). INVERIOR Pale shrimp or flesh-pink flowers on compact plants.

Blends well with darker colors.

Prices above 4, each: tr. pkt., \$1.00;  $\frac{1}{12}$  oz., \$3.00;  $\frac{1}{16}$  oz., \$5.75;  $\frac{1}{8}$  oz., \$10.50.

Pixie White (New). THYBRID The first absolutely snow-white Impatiens from seed. Supply limited. Tr. pkt., \$2.50; ½ oz., \$4.00; ½ oz., \$7.00.

#### DWARF BRIGHT ORANGE

Very uniform, extra dwarf, flat, spreading growth. This is an outstanding bright shade of orange and should sell very readily as a bedding subject for shade. Similar to European strains of *Beauty of Klettgau*, but our trials indicate it is superior in uniform dwarf habit. Tr. pkt., \$1.50; ½2 oz., \$4.50; ½6 oz., \$8.00; ½8 oz., \$14.40.

SEMI-DWARF. 9 to 12 inches.

Beauty of Klettgau. The same intense color as Dwarf Bright Orange, but somewhat taller. Ball Orig Seed.

Salmon-rose. Autumn Glow. Brilliant orange-scarlet flowers.

Prices above 3, each: tr. pkt., \$1.00;  $\frac{1}{32}$  oz., \$3.00;  $\frac{1}{16}$  oz., \$5.75;  $\frac{1}{8}$  oz., \$10.50.

TALL

Holsti Mixture. Bright mixture of pink, rose, salmon, orange, red, orchid and purple shades. Tr. pkt., 50c; ½6 oz., \$1.10; ½ oz., \$2.00.

#### **KALANCHOE**

ANNUAL (K. blossfeldiana)

S. See below 1-2 weeks 65-75°

Because of its showiness and ability to hold up well in the home, this plant is becoming more widely used each year. While they flower normally in January and February, they may be had in bloom for Christmas from a January sowing, if shaded for about 4 weeks starting September 1. April sowings produce good 3's for the following winter. Need 60° minimum nights, good air circulation.

- Tom Thumb. 2,500,000 S. 8 in. Pictured on opposite page. Produces perfectly rounded, symmetrical plants literally covered with small bright scarlet flowers. A January or February sowing will provide fine 4- or 5-in. specimens for next winter's sales. Ours is the original true-to-name strain of this popular variety.

  Tr. pkt., \$1.50; ½128 oz., \$3.00; ½40 oz., \$5.50; ½20 oz., \$10.00.
- Brilliant Star. 1,000,000 S. 18 in. A fine pot plant, producing flowers three times the size of the common varieties and of a brighter, fiery red color. Also valuable for cutting. Tr. pkt., \$1.00; ½28 oz., \$2.10; ½4 oz., \$3.85; ½2 oz., \$7.00.
- Vulcan (New). An improved Tom Thumb, Larger flowered and somewhat sturdier in growth, Tr. pkt., \$1.75.

Kale. See Flowering Cabbage, page 11.

#### KOCHIA (Summer Cypress)

ANNUAL (K. childsii)

45,000 S. 1-2 weeks 65-75°

Childsii. 2 ft. Symmetrical oval plants stay green throughout the entire season. Used for summer hedges. Tr. pkt., 15c; 1 oz., 50c; 4 ozs., \$1.80.



BE SURE TO INCLUDE ALL OF THE SWEET SIXTEEN VARIETIES ON YOUR SPRING SEED LIST THIS YEAR

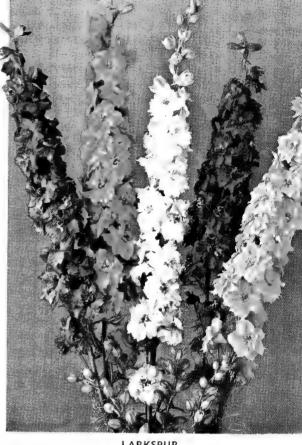


BALL CHRISTMAS PEPPER

### • BALL CHRISTMAS PEPPER

Compact plants with a profusion of cone-shaped fruit that is first green, later turning purple and then red. *Ball Orig. Seed.* Tr. pkt.. \$1.00; 1, oz., \$3.00; 1 oz.. \$9.00.

SEE PAGE 34 FOR OTHER PEPPERS



LARKSPUR
Lilac Supreme White Supreme Salmon Supreme
Brilliant Rose Dark Blue Supreme
SEE NEXT PAGE

KALANCHOE, TOM THUMB

#### • KALANCHOE, TOM THUMB

Produces perfectly rounded symmetrical plants literally covered with small, bright scarlet flowers A January or February sowing will provide fine 4- or 5-in. specimens for next winter's sales. Ours is the original, true-to-name strain of this popular variety. Tr. pkt., **\$1.50**; 1/128 oz., \$3.00; 1/64 oz., \$5.50; 1/32 oz., \$10.00.

SEE OPPOSITE PAGE FOR OTHER KALANCHOE

#### SUPREME LARKSPUR

Lilac Supreme White Supreme
Brilliant Rose Dark Blue Supreme
Salmon Supreme

Among the finest greenhouse cutting strains available. They are also best adapted to outdoor culture. For complete description, see page 26.

OTHER LARKSPUR LISTED ON NEXT PAGE





#### **LARKSPUR**

ANNUAL

(Delphinium ajacis) 8000 S. 3-4 weeks 55-65°

For Early Summer Cut Flowers Outdoors: If a sowing is made outdoors by growers in the near South 6 or 7 weeks before the ground freezes, plants well enough established to winter over in all except the most severe seasons can be produced. In the North sowing should be done as early in the spring as the soil can be worked—just as soon as the frost is out of the ground. Figure on 2 lbs. of seed to sow an acre or 1 oz. for 600 to 700 ft. of row, if seeds are sown about 1 inch apart. Height outdoors 2 to 3 ft.

Under Glass—Spring Flowering: For indoor growing, Larkspur is a nice crop to follow late Mums. Well started 3-inch banded or potted plants should be ready, and are produced by a September to January sowing. Space at least 12x12 in. on ground; 10x10 in. on raised beds should be ample. Maintain night temperature of not over 50°. Height indoors 4 to 5 ft.

**Germination:** Larkspur seed doesn't germinate well in high temperatures. If it must be sown when hot, better do so in flats set under a bench or in a cool shed. It requires 2 to 3 weeks to come through, sometimes longer.

PLEASE NOTE: Pound price applies to ½ pound or more of one variety only—not allowed for several varieties totaling 1 pound. All varieties listed below are base branching except the Hyacinth Flowered.

#### —— "7 BEST" —

This list is based on our greenhouse flowering trials. Generally strains which are found best under glass seem also best adapted to outdoor culture. See color plate, page 25.

- Salmon Supreme. Extra fine, medium salmon-rose.
- Dark Blue Supreme. The best deep violet-blue.
- Lilac Supreme. The best clear lavender; no orchid shading.
- White Supreme. The most vigorous white in our trials.
- Regal Salmon-Pink. A shade lighter than Salmon Supreme.
   Super Majestic Light Blue. An excellent light blue; outstand-
- Brilliant Rose. Deepest rose of all; fully double.
- 7 Best Mixture. Blended by formula from these 7 varieties. Prices above 7, each: tr. pkt., 40c; ½ oz., \$1.00; 1 oz., \$1.80; 4 ozs., \$6.00; 1 lb., \$18.00.

COLLECTION: One tr. pkt. each of above 7 named varieties for \$2.35.

#### OTHER GOOD VARIETIES

WHITE

Super Majestic White. Long-stemmed pure white. Regal White. Fine, compact spikes.

LAVENDER AND BLUE

Super Majestic Lavender. Beautiful lavender-mauve.

#### SALMON AND ROSE

Super Majestic Rose-Pink. Excellent deep rose.

• Regal Rose. Rich deep rose with fine heavy spikes.

#### MIXTURE

Super Majestic Mixture.

Prices above 6, each: tr. pkt., 40c;  $\frac{1}{2}$  oz., \$1.00; 1 oz., \$1.80; 4 ozs., \$6.00; 1 lb., \$18.00.

HYACINTH-FLOWERED. Produces one long non-branching spike. Early and non-shattering. For greenhouse use only. Space about 4x5 inches.

Dark Blue Purple

Lavender White Pink Mixture

Prices above 6, each: tr. pkt., 50c;  $\frac{1}{4}$  oz., \$1.00; 1 oz., \$3.00; 4 ozs., \$10.00.

#### LANTANA

ANNUAL (L. camara)

1300 S. 6-7 weeks  $65-75^{\circ}$ 

Very showy. One of the most satisfactory bedding subjects for areas where summer heat is excessive. Must be sown early with bottom heat.

Dwarf Mixture, 16 in. All colors.

Tr. pkt., 30c; 1/4 oz., 90c; 1 oz., \$2.70.

#### **LATHYRUS**

**PERENNIAL** (L. latifolius) 500 S. 2-3 weeks 65-75° LATIFOLIUS (Hardy or Everlasting Sweet Pea), 7 ft. Abundant source of short-stemmed flowers.

Pink Beauty White Pearl Red Mixture
Prices above 4, each: tr. pkt., 35c; ½ oz., 65c; 1 oz., \$1.90.

#### LAVANDULA (Lavender)

PERENNIAL (L. vera)

32,000 S. 2-3 weeks 65-75°

Munstead Strain. 12 in. Freely produces large sweet-scented flowers a month earlier than the common Lavender. Tr. pkt., 40c; ¼ oz., \$1.25; 1 oz., \$3.75.

#### **LIATRIS** (Gayfeather)

PERENNIAL (L. species)

9500 S. 3-4 weeks 65-75°

Excellent cut flowers with long, decorative, bold spikes. All are easily grown.  $3\ {\rm to}\ 5\ {\rm ft},$ 

 Pycnostachya. Extra long-stemmed with long, 15- to 18-inch flower spikes of rosy purple. Finest cut-flower kind.

Scariosa Purple Scariosa White

Prices above 3, each: tr. pkt., 35c; 1/4 oz., \$1.00; 1 oz., \$3.00.

• September Glory. Tall growing with purple spikes, Tr. pkt., 60c; ½ oz., \$2.00; 1 oz., \$6.00.

Elegans. Large, starry blooms of pure lavender with snow-white center. Tr. pkt., 60c; ¼ oz., \$2.00; 1 oz., \$6.00.

#### LILIES (Lilium)

PERENNIAL (Lilium species)

8000 S. 3-5 weeks 65-75°

Usually bloom the second season from seed.

• White Queen. This is the largest and finest seed propagated Lily we know of. Produces a plentiful quantity of real quality flowers in 16-18 months from seed. Pure white.

½ tr. pkt., 75c; tr. pkt., \$1.25; ½ oz., \$2.75; ¼ oz., \$5.00.

Tenuifolium (Coral Lily). Freely produces medium sized flowers of brilliant coral-red. 18-20 in. tall. May flowering. Tr. pkt., 60c; ½ oz., \$1.50; 1 oz., \$4.50.

#### LINARIA

ANNUAL (L. maroccana)

600,000 S. 2-3 weeks 65-75°

MAROCCANA (Miniature Snapdragon).

Northen Lights. An improved taller growing Linaria containing many new bright shades. Tr. pkt., 40c; ½ oz., \$1.35; 1 oz., \$4.00.

#### LINUM

PERENNIAL (L. species)

8500 S. 3-4 weeks 65-75°

Perenne (Perennial Flax). 2 ft. Attractive blue flower on slender stems. Tr. pkt., 30c; 1 oz., 90c.

Flavum Compactum. 8 in. Golden yellow flowers with dark green foliage. Ideal for rock gardens. Tr. pkt., 40c; ½ oz., 80c; 1 oz., \$2.50.

#### LOBELIA

ANNUAL (L. erinus)

For partially shaded locations and for plant combinations, Lobelias provide the brilliant blues lacking in most plants. Many growers prick off seedlings in bunches of 3 or 4 instead of individually.

COMPACTA. 6 in. Of dwarf, compact habit. Good edger.

• Blue Gown. Free flowering deep blue. Very fine.

**Cambridge Blue.** Very dwarf, light blue.

Mrs. Clibran Imp. Deep blue; white eye and light foliage.

White Lady. Clear glistening white.

Prices above 4, each: tr. pkt., 40c; 1/4 oz., \$1.25; 1 oz., \$3.75. 700,000 S. 2-3 weeks 65-75°



LOBELIA, CRYSTAL PALACE A "Sweet Sixteen" Variety

**Rosamond.** Rich violet-rose with white eye. Tr. pkt., **75c**;  $\frac{1}{16}$  oz., **\$1.35**;  $\frac{1}{4}$  oz., **\$4.00**.



#### ● CRYSTAL PALACE

Very dwarf deep blue with dark bronzy green foliage. A fine variety.

Tr. pkt., 40c; ¼ oz., \$1.25; 1 oz., \$3.75.

#### LOBELIA, Continued

PENDULA. Of trailing or pendulous habit.

Hamburgia. Sky-blue with white eye; dark green foliage.

Sapphire. Deep blue with white eye. Light green foliage.

Prices above 2, each: tr. pkt., 40c; 1/4 oz., \$1.20; 1 oz., \$3.60.

**PERENNIAL** (L. cardinalis).

725,000 S. 3-4 weeks 65-75°

Cardinalis (Cardinal Flower), 3 ft. Bright cardinal-red.

Tr. pkt., 50c; 1/16 oz., \$1.50.

#### LOVE APPLE

10,400 S. 2 weeks 65-75° ANNUAL (Solanum aculeatissimum) These colorful plants are widely used for floral arrangements when dried. Orange Fruited. 2 ft. Long, thorny branches of bright orange fruits about  $1\frac{1}{2}$  inches across. Tr. pkt., 50c;  $\frac{1}{8}$  oz., \$1.75.

See also Cherries, Christmas, page 13, Peppers, Christmas, page 31.

#### **LUNARIA** (Honesty or Money Plant)

**PERENNIAL** (L. biennis)

1500 S. 2-3 weeks 65-75°

Large, papery seed-pods used in dried bouquets. 2 ft.

Mixture. Tr. pkt., 25c; 1/4 oz., 40c; 1 oz., \$1.40.

#### LYCHNIS

PERENNIAL (L. species)

64,000 S. 3-4 weeks 65-75°

Chalcedonica (Maltese Cross). 3 ft. Scarlet flowers in heads.

Tr. pkt., 25c; ¼ oz., 60c; 1 oz., \$1.80.

Forrestii. 15 in. Mixture of rose, lilac, white and red. Excellent cut flower and bedding plant. Tr. pkt., 35c; ¼ oz., \$1.10; 1 oz., \$3.30.

#### **LUPINE** (Lupinus)

ANNUAL (L. Hartwegi)

1300 S. 2-3 weeks 65-75°

GIANT KING (Improved Hartwegi). 3 ft. Makes a nice spring cutflower crop flowered in 3-inch pots from a January sowing spaced close so as to flower one spike to a plant.

• Oxford Blue. Deep blue. Prices above 4, each: tr. pkt., 25c; 1 oz., \$1.00; 4 ozs. \$3.00.

Sky-Blue White Mixture

PERENNIAL (L. polyphyllus)

1000 S. 3-4 weeks 65-75°

Hardy Lupine. 4 ft. Fine for cutting. Requires a well drained location and thrives best in cool climate.

#### ● RUSSELL STRAIN=

Long, closely set spikes of extra large florets in rich self colors and unusual bicolors. Developed by a famous English specialist.

RESELECTED STOCK (Originator's packets): 65 seeds, 65c; 150 seeds, \$1.25; 350 seeds, \$2.50.

REGULAR SEED: Tr. pkt., 40c; 1/4 oz., 65c; 1 oz., \$2.10; 4 ozs., \$6.50.

MISCELLANEOUS POLYPHYLLUS VARIETIES. 1450 S.

Dark Blue Rose

Prices above 3, each: tr. pkt., 35c; 1/4 oz., 65c; 1 oz., \$2.00.

Harkness Regal Mixture. The standard fine mixture.

Tr. pkt., 20c; ¼ oz., 35c; 1 oz., \$1.10.

#### MARIGOLDS

See pages 28 and 29.

#### MARVEL OF PERU

ANNUAL (Mirabilis jalapa)

325 S. 2-3 weeks 65-75°

Mixture. 21/2 ft. A uniform strain of old-fashioned "Four O'Clocks." Fine range of bright colors. Roots can be stored indoors over winter in North. Tr. pkt., 20c; 1 oz., 40c;





MATRICARIA, BALL DOUBLE WHITE IMP.

#### MATRICARIA (Feverfew)

**PERENNIAL** (M. capensis)

145,000 S. 2-3 weeks 65-75°

CAPENSIS. 18 in. grown outside; 3 to 5 ft. when grown in greenhouse. Sow in October and November for greenhouse cutting late April through Decoration Day. A January sowing will bloom outdoors in July.

#### BALL DOUBLE WHITE IMPROVED ==

This strain has been carefully reselected for fully double flowers, and our own trials show it to be well over 90% true, double, imbricated blooms. Nearly all of the single and Anemone types have been removed. Ball Orig. Seed.

Tr. pkt., \$1.00;  $\frac{1}{16}$  oz., \$2.00;  $\frac{1}{4}$  oz., \$6.00; 1 oz., \$18.00.

Double White, Regular. A regular strain of double and semi-double Matricaria with some showing yellow centers

Tr. pkt., 40c; ½ oz., \$1.10; ½ oz., \$2.00; 1 oz., \$6.00.

ALL-DOUBLE DWARF, 8 to 10 in, Uniformly dwarf and compact plants which are a solid mass of ball-shaped flowers slightly over ½ inch across. Very attractive for border work and makes an excellent pot plant.

- Golden Nuggets. Rich butter-yellow.
- Snow Puffs. Pure white; very effective.

Prices above 2, each: tr. pkt., 35c; \(\frac{1}{16}\) oz., 60c; \(\frac{1}{4}\) oz., \$2.00.

Foxglove. See Digitalis, page 19.

#### MESEMBRYANTHEMUM

**ANNUAL** (M. criniflorum)

100,000 S. 2-3 weeks 65-75°

Criniflorum (Livingstone Daisy) 6 in. Spreading plants literally covered with 1-in, flowers in many attractive colors, Needs full sun and a dry location. Tr. pkt., 50c; 1/4 oz., \$1.20; 1 oz., \$3.60.

#### MIGNONETTE

ANNUAL (Reseda odorata)

27,000 S. 2-3 weeks 65-75°

Ball Forcing Strain. 16 in. Earliest and whitest forcing variety. Sow in January for spring cutting; very fragrant. Tr. pkt., 35c; ¼ oz., \$1.00; l oz., \$3.00.

#### MIMOSA

ANNUAL (M. pudica)

4500 S. 3-4 weeks 65-75°

Pudica (Sensitive Plant). Leaves collapse when touched. Interesting novelty. Tr. pkt., 30c; \( \frac{1}{4} \) oz., 65c; 1 oz., \$2.00.



### Dwarf Marigolds

#### Bedding or French

ANNUAL (Tagetes patula)

9000 S. 1-2 weeks 65-75°

These fine, uniform strains are among the most popular florist bedding plant subjects. Double varieties, such as Cupid, Spry, etc., are also valuable for combination boxes and pots. Will flower in about 8 weeks from seeding, for "pak" or flat sales.

#### "6 BEST" FOR BEDDING



10 in. Our most popular Marigold, pictured in a Market-Pak below. Well known for its brightly contrasting golden yellow Anemone crest over deep rich mahogany guard petals. Dwarf and free flowering.

Tr. pkt., 30c; ¼ oz., 65c; 1 oz., \$2.00; 4 ozs. \$6.00.

• Ball Dwarf Harmony. 10 in. Similar to Spry, except for color which is bright orange rather than yellow. Very rich effective color combination—deep maroon guard petals. Ball Orig. Seed.

• Butterball. 8 in, Most dwarf Marigold in our trials. Light butter-yellow petals tipped wine-red. Guard petals also wine-red. Compact habit.

● Lemon Drop. 9 in. Dwarf, compact plants with medium small, fully double, lemon-yellow flowers. Considered by many an improvement over Yellow Pygmy.

• Sunkist. 9 in. Dwarf and compact; deep golden orange flowers.

• Rusty Red. 13 in. Large, rust-red, fully double flowers, 2 inches across.

• 6 Best Dwarf Mixture. Balanced mixture of the above six.

Prices above 6, each: tr. pkt., 30c; 1/4 oz., 65c; 1 oz., \$2.00; 4 ozs., \$6.00.

#### **CUPIDS**

A combination of large flowers and dwarf habit, an entirely different dwarf Marigold. Extremely uniform, these compact, odorless, bushy plants produce 21/2-inch Mum-like blooms. Cupids reach 10 in. in open beds, but will bloom at a height of 4 to 6 in. in 3-in. pots.

• Cupid Orange. Bright orange.

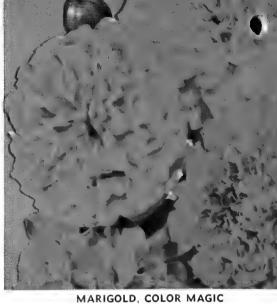
• Cupid Yellow. Bright creamy yellow. Cupid Gold. Midway between Cupid Yellow and Orange in color.

Cupid Mixture.

Prices above 4, each: tr. pkt., 50c; oz., 90c; ¼ oz., \$1.75; 1 oz.,



MARIGOLD, SPRY Ready for quick sale in Market-Pak.



Varies from deep mahogany-red to lemon-yellow-dwarf and free flowering. Ht., 11 in.

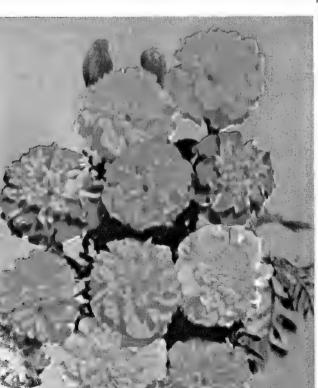


#### ● COLOR<sup>®</sup> MAGIC

Bushy growing plants, similar to the popular

Spry, but with fully double, 1½inch flowers in rich shades of yellow and orange irregularly marked dark red. Color changes as season progresses. Here is a Marigold which combines an excellent name, a dwarf, salable habit, and real bright "eye ap-peal." Should be on every bedding plant grower's list. Orig. Seed. Tr. pkt., **35c**; ¼ oz., **75c**; 1 oz.. **\$2.25**; 4 ozs., **\$6.75**.

VERTICAL BAR INDICATES NEW VARIETIES



Harmony. 14 in. Attractive Anemone type flowers; orange crest and maroon guard petals. Pot O' Gold. 15 in. Deep orange. Large flowers loosely formed with full centers and broad, overlapping petals. Flowers continuously in warmest weather.

Primrose. 12 in. Dwarf plants with fully double flowers an inch in diameter. Color is a rich golden yellow.

• Scarlet Glow. 12 in. Bright bronzy red, double flowers 1½ to 2 inches across are borne on dwarf plants.

Tangerine. 13 in. 2-in. double flowers of bright tangerine-orange.

• Yellow Pygmy. 10 in. Excellent very free flowering dwarf Marigold. 6 to 8 in. Double lemon-yellow and nearly 100% true.

Dwarf French Double Mixture. 12 in. Medium dwarf sorts.

Harmony Mixture. 14 in. A good mixture of double bicolors.

Prices above 8, each: tr. pkt., 30c; 1/4 oz., 65c; 1 oz., \$2.00; 4 ozs., \$6.00.

#### ● PETITE =



An extra dwarf strain of Marigolds with plants so dense and free flowering that the foliage is scarcely visible. Its extra early blooming habit makes it ideal for Market-Pak or flat sales. Grows about 6 in. tall and 10 in. wide.

Petite Orange. Fully double, bright orange flowers.

Petite Yellow. A clear, strong yellow; fully double.

Petite Gold. Between Orange and Yellow in color.

Petite Harmony. Golden anemone crest with deep mahogany guard petals; completely double.



PETITE MIXTURE. All of the above varieties blended by

Prices above 5, each: tr. pkt., 45c; 1/4 oz., \$1.35; 1 oz., \$4.00; 4 ozs., \$12.00.

## Tall Marigolds

#### **Cutting or African**

ANNUAL (Tagetes erecta)

10,000 S. 1-2 weeks 65-75°

Most any grower will find a spring crop of cut-flower Marigolds quite profitable. A January or February sowing, spaced about 4x5 inches and grown single-stem, will flower April and May. The All-Double and Carnation-flowered types are most popular, but be sure to include some of the Chrysanthemum-flowered Mission Giants for their excellent novelty value.

#### "5 BEST" FOR CUTTING

- Ball Giant Orange. Similar in type to All-Double Orange but somewhat larger flowered and of a more uniform, deep, bright orange color. Ball Orig. Seed.
- All-Double Orange. This belongs to the Fistulosa or large flowered, solid quilled-petal type. Nearly 100% double. An excellent, long-stemmed cut-flower strain.
- All-Double Lemon. Identical to the above, but a clear lemon-yellow.
- Gold Improved. Odorless. The popular Carnation-flowered intense orange. Excellent for greenhouse forcing.
- Yellow Supreme. Odorless. Similar to Gold Improved but with flowers a rich creamy yellow.
- Five Best Cutting Mixture. Our own carefully compounded formula mixture of the foregoing varieties balanced according to their commercial value.

  Prices above 6, each: tr. pkt., 30c; ¼ oz., 55c; 1 oz., \$1.75; 4 ozs., \$6.00.



Freely produces loosely-petaled, 3-inch flowers. Tr. pkt., 30c; ¼ oz., 55c; 1 oz., \$1.75; 4 ozs., \$6.00.

Man-in-the-Moon. Fully double, Carnation-flowered, pale ivory-yellow. Blends well with darker colors. Tr. pkt., 30c; ½ oz., 55c; 1 oz., \$1.75.

Odorless Carnation-Flowered Mixture. Ranges in color from deep orange to light yellow, Carnation-flowered,

Tr. pkt., 30c;  $\frac{1}{4}$  oz., 55c; 1 oz., \$1.65; 4 ozs., \$5.50.

#### Chrysanthemum-Flowered Types

Produces almost perfect incurved, Chrysanthemum-like blooms about 3 inches in diameter. Exceptionally vigorous and free branching in growth.

- Early Sunshine LLAMERICA SELECTION / 20 in. Early and free flowering with dozens of 1½-inch, Mum-like flowers of bright lemon-yellow. Blooms continuously throughout our hot summer.

  Tr. pkt., 30c; ¼ oz., 75c; 1 oz., \$2.25.
- Glitters. Large, Chrysanthemum-like flowers of soft golden yellow on long, strong stems. Long blooming period.
   Tr. pkt., 35c; ¼ oz., \$1.00; 1 oz., \$3.00.

Goldsmith (Mission Giant). Light golden orange; Chrysanthemumflowered. Tr. pkt., 35c; 1/4 oz., 75c; 1 oz., \$2.50.

• Happiness (Golden Crown). 16 in. Early and blooms very profusely with 2½-inch Mum-type flowers of rich golden yellow. Tr. pkt., 30c; ¼ oz., 75c; 1 oz., \$2.25.



This is our "Sweet Sixteen" cut flower Marigold for '59. You can offer it with confidence.



#### • CRACKERJACK =

A mixture of extra large, 100% double, Carnation-flowered blooms in shades of orange, gold and yellow. Much earlier and a better grower than Sunset Giants.

Tr. pkt., 40c;  $\frac{1}{4}$  oz., \$1.00; 1 oz., \$3.00; 4 ozs., \$10.00.

Mammoth Mum. The largest of this type. Light sulphur-yellow.
 Tr. pkt., 40c; ¼ oz., 90c; 1 oz., \$3.00.

Mission Giant Mixture. A well balanced Chrysanthemum-flowered mixture. Tr. pkt.,  $30c; \frac{1}{4}$  oz., 55c; 1 oz., \$1.75; 4 ozs., \$6.00.

#### Winter Flowering

Sow in late summer or early fall for plenty of winter cutting material.

Colorado Sunshine. Double, 3- to 4-inch, butter-yellow blooms.
 Tr. pkt., 50c; ¼ oz., \$1.50; 1 oz., \$4.50.

Lieb's Brown and Gold. Gold and dark red. Tr. pkt., 50c; ½ oz., \$1.50; 1 oz., \$4.50.

#### SINGLE BEDDING VARIETIES

- Flash. 14 in. Mahogany flowers with golden yellow margins.
- Naughty Marietta. 16 in. Semi-dwarf, bushy plants with finely netted leaves. Freely produces 2-inch, single, golden yellow flowers, each with an attractive dark red eye.

Red Head. 12 in. Anemone-flowered. Orange crest, tipped maroon, and copper-red to mahogany guard petals.

Sunny. Similar to Naughty Marietta, but clear yellow.

Prices above 4, each: tr. pkt., 30c; ½ oz., 60c; 1 oz., \$1.80; 4 ozs., \$5.40.

DWARF BUSH.

- Dainty Marietta (New). 12 in. Flowers are quite similar to the popular Naughty Marietta, but are more freely produced on extra dwarf, compact plants.
- Lulu. Same as following variety, but flowers are lemon-yellow.
- Ursula. Dense, rounded, free flowering plants with fine, lacy foliage. Small, golden vellow flowers.

Prices above 3, each: tr. pkt., 40c; 1/4 oz., \$1.20; 1 oz., \$3.60.

#### GLITTERS





#### MOONFLOWER

#### ANNUAL

65-75° (Ipomoea noctiflora) 110 S. 3-4 weeks

Black-Seeded. Large flowered, climbing, white Moonflower. Tr. pkt., 20c; 1 oz., 60c; 4 ozs., \$2.00.

#### MORNING GLORY

ANNUAL (Convolvulus species)

650 S. 3-4 weeks 65-75°

These vines are easily grown and most varieties are profuse bloomers, if grown in soil of low fertility and not over-watered. Sow 4 or 5 weeks before bedding sales. Band or pot seedlings 1 week after germination to prevent transplanting shock.

• Pearly Gates. Clear white with slight cream shading in throat. Tr. pkt., 30c; 1 oz., 90c; 4 ozs., \$3.00.

• Heavenly Blue. Clark's Mammoth Early Free Flowering Strain. The popular bright blue shade that is a solid sheet of vivid color all summer. Tr. pkt., 20c; 1 oz., 75c; 4 ozs., \$2.25.

Scarlett O'Hara. Vivid crimson-scarlet. Improved climbing strain. Tr. pkt., 20c; ¼ oz., 45c; 1 oz., \$1.25.

#### MYOSOTIS (Forget-Me-Not)

ANNUAL (M. oblongata)

44,000 S. 2-3 weeks 65-75°

#### BALL EARLY

Free flowering, spring blooming plants of this always popular bright blue flower can be had from a sowing made in December or January. This should not be confused with the other types listed with the perennials.

Tr. pkt., 50c; ¼ oz., \$1.50; 1 oz., \$4.50.

PERENNIAL (M. species)

42,000 S. 2-3 weeks 65-75°

• Blue Bird (Oblongata), 31,500 S. 12 in. Standard blue for spring greenhouse flowering. Tr. pkt., 40c; 1/4 oz., 90c; 1 oz., \$3.25.

Palustris Semperflorens. 12 in. Dwarf blue. Flowers from early spring until autumn. Tr. pkt., 40c; 1/4 oz., 90c; 1 oz., \$3.25.

VICTORIA. A dwarf, compact strain, 6 to 8 in.

Dark Blue Rose White **Dwarf Mixture** Prices above 4, each: tr. pkt., 40c; ½ oz., 90c; ¼ oz., \$1.65; 1 oz., \$4.90.

ALPESTRIS. Biennial.

• Royal Blue (Indigo Blue), 12 in. Deep rich blue, Tr. pkt., 40c; ¼ oz., 85c; 1 oz., \$3.00.

#### NAEGELIA (Temple Bells)

1.500,000 S. 2-3 weeks 65-75° ANNUAL (Smithiantha hybrida)

• Art Shades. Dwarf pot plants with Gloxinia-like leaves and clusters of slender, tubular flowers in shades of pink, red, yellow and orange; all with spotted throats. This showy plant requires the same culture as Gloxinias. Tr. pkt. (about 1000 seeds), \$1.50.

#### NASTURTIUM

ANNUAL (Tropaeolum majus)

175 S. 2-3 weeks 65-75°

Richly colored, long-stemmed, fragrant flowers are excellent for cutting or bedding; does best in cool climate.

DOUBLE GLEAM TYPE. Of trailing or climbing habit. Vigorous growers; fine for greenhouse cutting or window boxes.

• Golden Gleam. Rich, golden yellow.

• Scarlet Gleam. A brilliant scarlet.

• Gleam Mixture. A complete mixture of all double varieties.

Prices above 3, each: 1 oz., 40c; 4 ozs., \$1.25; 1 lb., \$4.00.

DWARF DOUBLE TYPE. Fully as double and large as the Gleam type, but of dwarf, compact, rounded growth. 12 to 15 in. high.

Bright color. Very compact and exceptionally free flowering. 1 oz., 45c; 4 ozs., \$1.50; 1 lb., \$4.50.

Golden Globe. Golden yellow.

Scarlet Gem. Brilliant scarlet.

Mixture of all colors in this dwarf class.

Prices of above 3, each: 1 oz., 45c; 4 ozs., \$1.50; 1 lb., \$4.50.

SINGLE VARIETIES. 225 S.

Dwarf Mixture of all colors in this class. 1 oz., 30c; 4 ozs., \$1.00; 1 lb., \$3.00.



NIEREMBERGIA, PURPLE ROBE A wonderful bedding or edging plant—on our Sweet Sixteen list this year.

#### NEMESIA

**ANNUAL** (N. strumosa suttonii).

90,000 S. 2-3 weeks 65-75°

18 in. This large-flowered, long-stemmed strain is fine for spring cutting.

Mixture of all colors in this cut flower class. Tr. pkt., 25c;  $\frac{1}{8}$  oz., 60c;  $\frac{1}{2}$  oz., \$2.00.

NANA COMPACTA. 6 to 8 in. Ideal for combination work.

Fire King. Cerise-scarlet.

Orange Prince. Rich orange.

Triumph Mixture. A very attractive mixture with a wide range of

Prices above 3, each: tr. pkt., 35c; 1/8 oz., 75c; 1/2 oz., \$2.50.

#### NEPETA

PERENNIAL (N. mussini)

52,000 S. 2-3 weeks 65-75°

Mussini (June-flowering "Catnip"). 12 in. Neat bushes with light blue flowers; aromatic. Tr. pkt., 30c; ¼ oz., 90c; 1 oz., \$2.70.

#### NICOTIANA (Flowering Tobacco)

ANNUAL (N. affinis)

400,000 S. 1-2 weeks 65-75°

Showy plants with a pleasing evening fragrance.

Crimson Bedder. 15 in. Compact, very free flowering. Deep crimsonred. Tr. pkt., 30c; ½ oz., 60c; 1 oz., \$2.00.

White Bedder (New). 15 in. Similar in habit and freedom of bloom to Crimson Bedder, but the glistening white flowers are much more showy. Try this as a background for colored dwarf Petunias. Tr. pkt., 35c; ¼ oz., \$1.00; 1 oz., \$3.00.

White. 3 ft. Large-flowered. Tr. pkt., 20c; 1/4 oz., 40c; 1 oz., \$1.20.

#### SENSATION MIXTURE =

(Daylight Strain). 2 ft. The flowers of this Nicotiana have the unique feature of remaining open all day, even in brilliant sunshine. They have the same delightful evening scent as the older types, while the colors range from white through many shades of cream and pink to purple and deep crimson. Plants are bushy in habit, ideal for bedding. Tr. pkt., 40c; ¼ oz., \$1.00; 1 oz., \$3.25.

#### NIEREMBERGIA (Cup-Flower)

ANNUAL

175,000 S. 2-3 weeks 65-75°

#### ● PURPLE ROBE ==

6 in. This is a wonderful bedding or edging plant. The 1-inch, deep violet-blue flowers are lavishly produced on dwarf plants throughout the summer. Retains its brilliance even under

strong sunlight. Sow several weeks before most bedding plants to get early flowering. Tr. pkt., **50c**;  $\frac{1}{32}$  oz., **\$1.75**;  $\frac{1}{16}$  oz., **\$3.25**;  $\frac{1}{4}$  oz., **\$9.75**.

#### NIGELLA

**ANNUAL** (N. damascena)

11,000 S. 2-3 weeks 65-75°

Miss Jekyll (Love-in-a-Mist) 18 in. Attractive blue flowers; lacy foliage. Tr. pkt., 30c; 1 oz., \$1.20.

### Phlox

ANNUAL (P. Drummondi)

14,000 S. 2-3 weeks 65-75°

Annual Phlox are among our most showy bedding items and more popular today than ever before. This is one of the few widely grown native American flowers—was discovered by an Englishman named Drummond in 1835 on the plains of Texas. It stands heat well and rivals Petunias for showiness, having the added advantage of a more dwarf, neat habit (Nana Compacta Global types) than most Petunias.

GRANDIFLORA. 15 to 18 in. Fine, free flowering bedding and border material. Also nice for cutting.

Chamois Rose. Light creamy pink with white center.

Coccinea. Crimson-red. Rosea. Medium rose-pink.

Violet. Try this with white or yellow.

White. A clear, even white.

Prices above 5, each: tr. pkt., 40c; \(\frac{1}{4}\) oz., 80c; 1 oz., \$2.50.

• Special Mixture of all colors in this tall class.

Tr. pkt., 30c; ¼ oz., 60c; 1 oz., \$2.00.

Cuspidata Mixture (Star of Quedlinburg). A mixture of star-shaped flowers. Tr. pkt., 35c; 1/4 oz., 80c; 1 oz., \$3.00.

GRANDIFLORA GIGANTEA. Somewhat stronger growth and larger flowered than the regular Grandifloras.

• Art Shades Mixture. Mixture of pastel shades; white eyes. Tr. pkt., 45c; ½ oz., \$1.10; 1 oz., \$3.30.

NANA COMPACTA. 6 to 8 in. Of dwarf, compact growth, fine for low bedding and border work



#### **● GLOBE MIXTURE**=

8 in. ALL-AMERICA SCIECTION The best of the dwarf Phlox types. Many bedding plant growers are now using Globe exclusively for mixed dwarf Phlox. Reason: beautifully rounded superior

plant habit. See this in color on page 25. Tr. pkt., **50c**; ½ oz., **\$1.50**; ½ oz., **\$2.65**; 1 oz., **\$8.00**.

• Fireball (Scarlet)

Violet

Salmon-Rose

Snowball (White) Sky-Blue Prices above 6, each: tr. pkt., 45c; 1/4 oz., \$1.10; 1 oz., \$3.30

Isabellina (Buff-Yellow)

• Mixture. Dwarf mix. Tr. pkt., 35c; 1/4 oz., \$1.00; 1 oz., \$3.00.







BE SURE TO INCLUDE ALL OF THE SWEET SIXTEEN VARIETIES ON YOUR SPRING SEED LIST THIS YEAR



#### PHLOX, TWINKLE

ALL-AMERICA A SELECTION Pictured above. 7 in. Dainty flowers of the Cuspidata or starred type, with pointed petals, are lavishly produced on dwarf, compact plants. An unusually wide assortment

of colors, both solid and bicolor, are included in this blend. Blooms very early in flats and continues well into the summer.

Tr. pkt., 75c;  $\frac{1}{8}$  oz., \$1.30;  $\frac{1}{4}$  oz., \$2.35; 1 oz., \$7.00.

• Ideal Bedding Mixture. 6 to 8 in. This florist strain is exceptionally uniform in its dwarf habit. An unusually bright mixture well adapted for pot and combination work or for borders. Tr. pkt., 75c; ¼ oz., \$2.00; ½ oz., \$3.50; 1 oz., \$6.00.

• Beauty Mixture (Sutton's). A compact and very free flowering strain with large blooms. Excellent for pot plants, combinations or bedding. Tr. pkt., 50c; ¼ oz., \$1.50; 1 oz., \$4.50.

#### PERENNIAL PHLOX

PERENNIAL (P. paniculata)

2500 S. 3-4 weeks 65-75°

Hardy Phlox should be sown outside in late fall to germinate in spring, or sown and refrigerated for about one month prior to germinating in a 65-75° temperature.

Beltsville Beauty. 3 ft. A greatly improved perennial Phlox. Largeflowered, and a wide assortment of colors.

Tr. pkt., 85c; ¼ oz., \$2.50; 1 oz., \$7.50.

Decussata Mixture. 3 ft. Our strain of this popular perennial Phlox contains many large-flowered, brilliantly colored types.

Tr. pkt., 40c; ¼ oz., 80c; 1 oz., \$2.50.

#### **OENOTHERA**

PERENNIAL (O. species)

350,000 S. 2-3 weeks 65-75°

Showy sun loving plants with large flowers.

Missouriensis. 12 in. Large-flowered yellow. Tr. pkt., 35c; ¼ oz., \$1.75; 1 oz., \$5.25.

Painted Daisy. See Pyrethrum, page 46.

#### **PANSY**

See pages 32 and 33.

#### **PASSIFLORA** (Passion Flower)

ANNUAL (P. caerulea grandiflora)

3600 S. 2-4 weeks

Caerulea. Greenhouse climber with large pale pink flowers surmounted by a purple and white crown.

Tr. pkt., 40c;  $\frac{1}{8}$  oz., 90c;  $\frac{1}{4}$  oz., \$1.65; 1 oz., \$5.00.

#### **PENTSTEMON** (Beard Tongue)

ANNUAL (P. gloxinioides)

55,000 S. 2-3 weeks 65-75°

Sensation Mixture. 2 ft. Attractive bell-shaped flowers produced on good spikes in an exceptional range of colors. Much used for bedding or in borders. Used as an annual or perennial. Tr. pkt., 40c;  $\frac{1}{4}$  oz., \$1.00; 1 oz., \$3.25.

#### PERENNIAL

(Murrayanus grandiflorus)

15,000 S. 3-5 weeks 65-75°

● Avalon Mixture. 3 ft. Spikes of fine, large flowers in an extremely wide and unusual range of colors.

Tr. pkt., 40c; ½ oz., 80c; ½ oz., \$1.50; 1 oz., \$4.50.

#### PEONY

PERENNIAL (Paeonia Species)

100 S. Frost germinator

Garden Varieties, Mixture. Both double and single types are represented in this assortment of colors. Blooms in 3 years from seed. 100 seeds, \$2.50.

#### PEPPER, CHRISTMAS

ANNUAL (Capsicum species)

9000 S. 3-4 weeks 65-75°

Very showy pot plants for the December holiday season. Sow April to July, finishing one plant in a 3- or 4-inch pot or three in a 5. Does best grown under glass throughout summer.

• Ball Christmas Pepper. See this in color on page 25. Compact plants with a profusion of cone-shaped fruit that is first green, later turning purple and then red. *Ball Orig. Seed.*Tr. pkt., \$1.00; ¼ oz., \$3.00; 1 oz., \$9.00.

• Candle Pepper (Craigi Christmas Pepper). Similar to Ball Christmas Pepper, but the plants are smaller leaved. Small fruit, very freely produced well above the foliage, turns from white to brilliant red. Tr. pkt., 50c;  $\frac{1}{4}$  oz., \$1.50; 1 oz., \$4.75.

Red Fangs. One inch slender fruits, which turn directly from green to red, are borne in clusters. Well adapted for Christmas use. Ball Orig. Seed. Tr. pkt., 50c; ¼ oz., \$1.50; Î oz., \$4.75.

See also Cherries, Christmas, page 13; Love Apple, page 27.

#### PETUNIAS

See pages 34-43.



Pansy flowering trials at West Chicago, Phil Jones, Plant Breeding Dept.; Arne Knutsson and John Holden, Seed Dept., in the photo (L. to R.). It is extensive trials such as these that help us select the strains we offer to the florist trade. Tops on the list are our "Four Best" and our "Four Aces Formula Mixture" listed below. For greater profits from Pansies, try some of these better varieties combined with the new self-service containers listed on pages 98-105.

### Profitable Pansies

ANNUAL (Viola tricolor)

20,000 S. 2-3 weeks  $65-75^{\circ}$ 

Pansies are second only to Petunias in popularity amongst seed grown bedding subjects. Be sure to have plenty of plants to meet this demand. There are two basic schedules for growing Pansies for bedding plant sales:

Mid-winter Sowing in December or January. After they have germinated carry them along as cool as possible till spring—transplant them into frames in March (Chicago latitude) for May sales. One prominent Illinois grower sows early December, transplants 30 to a "half flat", and

carries them in a cold house  $35\cdot40^\circ$  till March 1. Then he sets them out in frames where they start to bloom early May and are sold for \$1.50 per flat. Where smaller quantities (6 to 12 plants) are wanted, Market-Paks are ideal.

**Summer Sowing.** (Early August). This is the most popular time for establishing plants which are spaced about 4x6 in. in frames, given some protection over winter—loose straw, perhaps. Plants should be well established before winter sets in—even budded so that blooms will be available early in the spring to help sell the plants.

#### FOUR BEST



• Ball Giant Mixture. This is our finest and most popular bedding Pansy mixture. We blend this ourselves, using the best available strains of Swiss Giants, adding separate varieties to insure a good balance of

colors, Tr. pkt., 85c;  $\frac{1}{5}$  oz., \$1.65;  $\frac{1}{4}$  oz., \$3.00; 1 oz., \$10.00; 4 ozs., \$36.00.

- Roggli Giant Elite Mixture. A choice Swiss bedding strain, predominating in rich red and bronze shades with the typical large, deep blotches. The finest large flowered Pansy. We supply originator's imported seed only.

  Tr. pkt., \$1.50; ½ oz., \$3.75; ¼ oz., \$7.00; 1 oz., \$22.00.
- Steele's Jumbo Mixture. We handle the *originator's seed* of this popular American strain. Tr. pkt., \$1.15; ½ oz., \$3.40; ½ oz., \$6.10; ½ oz., \$10.35; 1 oz., \$16.55.
- Canadian Giants. This selection from Maple Leaf Giants is extra large flowered.

  Tr. pkt., \$1.00; ½ oz., \$1.85; ¼ oz., \$3.30; 1 oz., \$11.00.

#### • FOUR ACES FORMULA MIXTURE =

Recognizing that each of the several Pansy specialist's strains possesses some important advantage, we have formulated this special mixture which, properly handled, has proven to be an ideal Pansy strain. This mixture includes seed of the originator's Roggli Giants with their deep, bright shades and compact habit; Steele's Jumbo for early blooms; Canadian Giants with their exceptional flower size; and Ball Giant Mixture to complete a full, well rounded color range.

Grown slowly and cool, the slight variations in habit of growth of these strains will not be found objectionable. Each of your Pansy customers will find his favorite strain in this mixture plus qualities imparted by the other top-notch Pansies. Here is a Pansy mixture that you can promote with complete confidence. Special note: sow thin and transplant all normal seedlings; otherwise, as in any other mixture, color balance is lost. A Ball Origination.

Tr. pkt., \$1.00; ½ oz., \$2.75; ¼ oz., \$5.00; 1 oz., \$15.00.

America. An exceptionally free flowering mixture with medium sized blooms. Dwarf and extra early.

Tr. pkt., 65c; ¼ oz., \$2.75; 1 oz., \$10.00.

• Ball Dwarf Giants Mixture. A fine Swiss Giant strain selected for dwarf and compact habit. Ball Orig. Seed.

Tr. pkt., 65c; ½ oz., \$1.40; ½ oz., \$2.75; 1 oz., \$9.00; 4 ozs., \$32.00.

## **Pansies**

#### BALL WINTER FLOWERING

Our greatly improved strain of this tall winter cut-flower variety. At its best from a late summer sowing—not for bedding. ½ tr. pkt., 65c; tr. pkt., \$1.10; ½ oz., \$2.75; ½ oz., \$5.00.

**Butterfly Mixture.** Ruffled 2½- to 3-in. flowers, including unusual apricot, terra cotta and rosy orchid shades, are freely produced on vigorous plants. *Originator's seed* only.

Tr. pkt., \$1.00;  $\frac{1}{8}$  oz., \$2.90;  $\frac{1}{4}$  oz., \$5.20;  $\frac{1}{2}$  oz., \$9.40.

#### CLEAR CRYSTALS

Pictured at right. A sparkling mixture of red, purple, orange, lilac, yellow, blue and white colors—all without dark blotches. Flowers are slightly ruffled and nearly as large as the Swiss Giants. Excellent for buyers who dislike blotched Pansies. Tr. pkt., \$1.00; ¼ oz., \$2.50; 1 oz., \$7.50.

- Color Carnival. A remarkable American produced strain of Swiss Giants. Our trials indicate that it is quite similar to the best imported Roggli strain. Large flowers in a superb mixture of colors. Tr. pkt., \$1.50; ½ oz., \$3.75; ¼ oz., \$7.00; l oz., \$22.00.
- Englemann's Giant Mixture. A large flowered and brightly colored strain, many being penciled or veined, Fairly compact growth. We offer originator's seed only.

Tr. pkt., \$1.00;  $\frac{1}{8}$  oz., \$3.30;  $\frac{1}{4}$  oz., \$6.00; 1 oz., \$18.00.

• Felix. Well ruffled flowers of good size carried on fairly dwarf plants. Colors are rich and unusual, each flower being marked with dark "whiskers" characteristic of this strain. Ball Orig. Seed. Tr. pkt., \$1.00; ¼ oz., \$3.00; 1 oz., \$9.00

Improved Swiss Giants. Predominates in rich bronze and red shades. Tr. pkt., 65c; ¼ oz., \$2.75; 1 oz., \$9.00.

Maple Leaf Giants. An excellent, extra large flowered strain. Heavy growth with good stems.

Tr. pkt., 65c; ½ oz., \$1.65; ¼ oz., \$3.00; 1 oz., \$10.00.

Oregon Giants. A complete mixture of long-stemmed, large flowered Giant Ruffled Pansies. *Originator's seed*. 200 seeds, 50c; 600 seeds, \$1.25; ½ oz., \$4.00; 1 oz., \$12.00.

• Ruffled Rainbow. An unusually uniform dwarf mixture characterized by medium large flowers with distinctly ruffled petals and a wide range of colors.

Tr. pkt., \$1.00; ½ oz., \$2.75; ¼ oz., \$5.00; 1 oz., \$15.00.

• Tigress. "Miniature Pansies". Reds, yellows, orchids and purples in novel striped and blotched arrangements of at least 3 colors create a striking appearance. Tr. pkt., 50c; ½ oz., \$1.75; 1 oz., \$5.00.

BALL GIANT MIXTURE
Our finest and most popular bedding Pansy mixture.





CLEAR CRYSTALS
A sparkling mixture—bright colors without blotches.

#### SEPARATE COLORS

Alpenglow. Mahogany-red with dark center. Berna. Dark velvety blue.

• Coronation Gold. The finest, clear golden vellow.

Delft Blue. Porcelain-blue.

Firebeacon. Bright, flaming orange with dark center.

Giant Orange. Light orange.

Jet Black. 80% of the flowers are a true black throughout the spring, the purple undertone not becoming apparent until hot weather.

• Lake of Thun. Large-flowered blue with darker center.

Mont Blanc. Ivory-white with small yellow eye.

• Raspberry Rose. Soft pink with contrasting velvety blotch.

Redwing. Red and yellow petals, darker center.

Rhinegold. Large-flowered yellow with dark center.

• True Blue. Solid mid-blue without blotch.

**Prices** above 13, each: tr. pkt., 80c;  $\frac{1}{8}$  oz.. \$2.00;  $\frac{1}{4}$  oz.. \$3.50; 1 oz., \$11.00.

Pay Dirt. Large yellow with black lines. *Originator's seed*. ½ 6 oz., \$3.35; ½ oz., \$6.05; ¼ oz., \$10.90.

• Paper White. Pure white with small yellow eye.

Blue Butterfly. Blue and white. Improved Lord Beaconsfield.

• Redskin. Solid dark red.

**Prices** above 3, each: tr. pkt., \$1.00;  $\frac{1}{18}$  oz., \$2.75;  $\frac{1}{4}$  oz., \$5.00; 1 oz., \$15.00.

#### **Originator's Separate Colors**

For flower size, uniformity of color and habit, these Originator-grown Swiss Giant Pansies are the finest separate color Pansies available.

• Eiger (Rhinegold).

Hohenfeuer (Firebeacon).
 Blumlisalp (Raspberry Rose).
 Berna, Originator's.

Alpengluhn (Alpenglow).
Jungfrau. White.
Monch (Coronation Gold).

Thunersee (Lake of Thun).

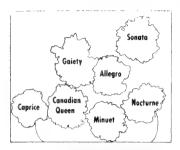
• Roggli Giant Elite Mixture. (See 4 Best, opposite page).

• Roggli Straight Color Mixture. Our own mixture of the above Roggli separate colors, blended by formula.

**Prices** above 10 varieties, each: tr. pkt., \$1.50;  $^{1}$ s oz., \$3.75;  $^{1}$ 4 oz., \$7.00; 1 oz., \$22.00.



# Colorful FOR BEDDING.



Here are representative blooms of the 6 fastest selling solid colors plus the popular variegated rose and white Gaiety. See diagram above for variety names.

ALL VARIETIES LISTED
ON THESE TWO PAGES
ARE TENTER
PETUNIAS

#### CANADIAN STRAINS

#### MIXTURES



#### ●BALL ALL-DOUBLE MIXTURE

Our top quality, all-purpose double mixture, containing liberal portions of the most popular straight colors blended by formula with our well known, large-flowered Canadian strains. Varie-

ties contained in this mixture are selected for uniformity of height and blooming date. All important double Petunia colors are represented in this strain. Our finest double mixture.  $\frac{1}{2}$  tr. pkt., \$2.50; tr. pkt., \$4.00;  $\frac{1}{128}$  oz., \$7.60;  $\frac{1}{164}$  oz., \$14.45;  $\frac{1}{132}$  oz., \$28.00;  $\frac{1}{16}$  oz., \$55.00.

**Canadian Mixture, Improved.** Basically improved by the addition of more fine rose, pink and salmon shades.  $\frac{1}{2}$  tr. pkt., \$2.50; tr. pkt., \$4.00;  $\frac{1}{128}$  oz., \$7.60;  $\frac{1}{64}$  oz., \$14.45;  $\frac{1}{32}$  oz., \$28.00;  $\frac{1}{16}$  oz., \$55.00.

Colossal Shades of Rose, Imp. The largest flowered All-Double Petunia. Shades of pink and salmon-rose.  $\frac{1}{2}$  tr. pkt., \$2.50; tr. pkt., \$4.00;  $\frac{1}{128}$  oz., \$7.60;  $\frac{1}{16}$  oz., \$14.45;  $\frac{1}{32}$  oz., \$28.00;  $\frac{1}{16}$  oz., \$55.00.

#### SEPARATE COLORS

**America.** Medium sized bright rose flowers very freely produced on a medium tall plant. If pinched once will produce a very nice pot plant.  $\frac{1}{2}$  tr. pkt., \$1.35; tr. pkt., \$2.50;  $\frac{1}{128}$  oz., \$4.50;  $\frac{1}{6}$  oz., \$8.00;  $\frac{1}{32}$  oz., \$14.50;  $\frac{1}{16}$  oz., \$28.00;  $\frac{1}{3}$  oz., \$55.00.

• Canadian Queen. Pictured in arrangement, above. A very fine, true pink double, somewhat lighter than Rose of Canada. The large, well ruffled flowers are carried nicely above the compact, bushy plants. A first class, all-around double Petunia. ½ tr. pkt., \$2.50; tr. pkt., \$4.00; ½28 oz., \$7.60; ½4 oz., \$14.45; ½2 oz., \$28.00; ½6 oz., \$55.00.

#### **CULTURAL SUGGESTIONS**

Doubles must be sown earlier than ordinary Petunias to sell at the same time. For "paks" or flats sow from 12 to 15 weeks before sale, depending on what your market demands. We recommend (Chicago, 50°) January 1 sowing for strong 3-inch the latter part of May. For May combinations, heavy 3-inch should be sown December 15—no later. For 4- or 5-inch for April and May potted plant sales or 3-inch for March, a well shaped plant with several blooms needs a November 15 sowing. Doubles, like other Petunias, need good drainage, and cool temperatures—they will lose their dwarf habit of growth if temperatures are run above 55° (unless there is an abundance of sunshine to offset this). Certain varieties need one pinch to retain suitable shape for finished plants. They all break very readily. Sonata, Snowball and Minuet are especially responsive to a pinch.

• Cotton Candy. (Pictured below). An appealing soft creamy salmon suffused with pink, reminiscent of the childhood treat from which it derives its name. Extra large, fully double flowers borne in abundance on vigorous but dense plants. Fine for pots or bedding.

**Black Prince.** A bright burgundy-wine color, Flowers are only medium in size, but freely produced.

Northern Lights. Shades of medium deep rose with some bicolored types. Typical fine Canadian habit of growth.

**Purple and White** (New). Large completely double flowers of richly variegated wine-purple and white. A striking color combination.

Rose of Canada. Fully double, bright medium rose flowers about 3 inches across are freely produced on compact, bushy plants.

Salmon Red (New). The nearest approach to a true scarlet-red double; more nearly red than Allegro. Very showy.

Prices above 6, each:  $\frac{1}{2}$  tr. pkt., \$2.50; tr. pkt., \$4.00;  $\frac{1}{128}$  oz., \$7.60;  $\frac{1}{6}$  oz., \$14.45;  $\frac{1}{32}$  oz., \$28.00;  $\frac{1}{16}$  oz., \$55.00.

• Burpee Orchid (Not a Canadian variety). Improves Minuet mainly in its somewhat warmer, rose-lavender shade. Should be pinched for best plant habit.

 $\frac{1}{2}$  tr. pkt., \$2.75; tr. pkt., \$4.50;  $\frac{1}{28}$  oz., \$8.50;  $\frac{1}{64}$  oz., \$16.00.



# Double Petunias POTS, OR COMBINATIONS

ANNUAL (P. hybrida)

All Petunia seed averages about 285,000 per ounce 1-2 weeks 65-75 Double Petunias are among your most versatile spring plants.

- Many are bought in "paks" and flats by the bedding plant trade, Growers find that six plants in a Market-Pak No. 42 and twelve plants in a Market-Pak No. 60 both make quality units for ready sales.
- Doubles in 2½-in, and 3-in, pots for bedding continue to be popular, Jiffy-Pots give superior quality plants and bring satisfied customers back for more. Having the first flower open also helps your sales.
- In 3- and 4-inch pots, double Petunias provide the backbone for May combinations.
- Heavy, flowering doubles in 3-, 4- and 5-inch pots are in good demand for Mother's Day.
- For budget sales in March and April, blooming plants in 3-inch pots have met excellent response.

We offer the finest strains of Double Petunias obtainable. Our recommendations are based on complete trials, both in 3-inch pots for spring blooming in our greenhouse, and in our field trials for summer performance.

# PAN-AMERICAN STRAINS

#### ALLEGRO

Medium to large, fully double flowers of clear, bright salmon are carried on fairly dwarf plants. An attractive color in the All-Doubles and the finest in its color class.  $\frac{1}{2}$  tr. pkt., \$2.75; tr. pkt., \$4.50;  $\frac{1}{128}$  oz., \$8.50;  $\frac{1}{16}$  oz., \$16.00;  $\frac{1}{32}$  oz., \$29.50;  $\frac{1}{16}$  oz., \$58.00.

• Caprice (Pictured in arrangement on opposite page). Medium sized rose-pink flowers are carried on fairly dwarf plants. One of the best rose doubles available. ½ tr. pkt., \$2.75; tr. pkt., \$4.50; ½28 oz., \$8.50; ½4 oz., \$16.00; ½2 oz., \$29.50; ½6 oz., \$58.00.







CANADIAN QUEEN

For a light rose-pink, uniform fine habit, large, fully double flowers delicately fringed, you can't beat Canadian Queen.

- Presto (New). Large, fully double flowers of rich, bright rose and pure white. The first Pan-American variegated double Petunia.
- Sonata. (Pictured in arrangement on opposite page). Extra large, fully double, pure white flowers. Should be pinched to encourage best plant habit.

**Minuet.** (Pictured in arrangement on opposite page). Medium sized lavender. Tall; should be pinched.

**Nocturne.** Elk's Pride purple, medium large flowers are borne on vigorous, but compact plants.

Prices above 4, each:  $\frac{1}{2}$  tr. pkt., \$2.75; tr. pkt., \$4.50;  $\frac{1}{28}$  oz., \$8.50;  $\frac{1}{6}$  oz., \$16.00;  $\frac{1}{2}$  oz., \$29.50;  $\frac{1}{2}$  oz., \$58.00.

**Glorious Mixture.** Contains all Pan-American colors. In transplanting, be sure to use both large and small seedlings thus insuring a complete range of colors.  $\frac{1}{2}$  tr. pkt., \$2.25; tr. pkt., \$4.00;  $\frac{1}{128}$  oz., \$7.60;  $\frac{1}{164}$  oz., \$14.45;  $\frac{1}{32}$  oz., \$28.00;  $\frac{1}{16}$  oz., \$55.00.

# JAPANESE STRAINS

- Gaiety. (Pictured in arrangement on opposite page). The blotched or variegated flowers combine bright rose-pink with contrasting pure white to produce a "strawberries and cream" effect. The blooms are medium large, well doubled and fringed, and are carried on dwarf, base-branching plants—qualities which go to make an excellent Petunia for pots or bedding. The most popular Japanese variety.
- Attraction. Striking, brightly colored rose and white mottled; deeper than Gaiety. Medium habit.
- Pink Perfection (World Beauty). Deep rose color and uniformly dwarf growth.

White Swan (Snowball Imp.) This pure white double improves the original Snowball in flower size and habit of growth.

Blue Monarch. (An improved Blue Brocade.) Purple. Prefer Nocturne.

Sunset Giant. A bright salmon-scarlet double of Japanese origin. Quite similar, in our trials, to Allegro, but may show slight differences elsewhere.

Victorious Mixture. We blend this mixture ourselves from the above Japanese varieties.

**Prices** above 7, each:  $\frac{1}{2}$  tr. pkt., \$2.25; tr. pkt., \$4.00;  $\frac{1}{28}$  oz., \$6.50;  $\frac{1}{26}$  oz., \$12.00;  $\frac{1}{26}$  oz., \$22.00;  $\frac{1}{26}$  oz., \$40.00.



PINK VELVET



WHITE VELVET Above, two of the new "Velvet Series" produced by our plant breeders.



# Multifloras (F) HYBRID

# **BALL "VELVET" VARIETIES**

# PINK VELVET =



A beautiful, clear rose-pink. Identical in color and flower size to the popular Celestial Rose Imp., but more uniform in habit, color and freedom of bloom. We think you'll agree that this is one of the best Hybrid Multifloras you've seen, Ball Orig. Seed,

Blue Velvet (New). Bright mid-blue flowers freely produced on plants of medium height. This is not the violet-blue color usually associated with Petunias. Ball Orig. Seed. Red Velvet, Our own F1 Hybrid Multiflora scarlet-red. Similar to Comanche but may show slight differences under some growing conditions, Ball Orig. Seed.

Salmon Velvet (New-A Ball Origination). A medium deep salmon between Linda and Sioux in color. Flowers are lavishly produced on uniform, vigorous plants.

#### WHITE VELVET

A clear white Multiflora with a definite silvery sheen. Uniform habit of growth and very free flowering. May show advantages over Paleface under certain growing conditions. Ball Orig. Seed.

# "SATIN" PETUNIAS

Peach Satin. Warm salmon-pink; large flowered and somewhat taller than Red Satin. Pink Satin. Brilliant rose-pink. Globe-shaped plants are slightly taller than Red Satin.

#### ● RED SATIN®

More dwarf and compact than Comanche and may be a bit brighter red in color under some growing conditions.  $\frac{1}{12}$  tr. pkt., \$1.25; tr. pkt., \$2.25;  $\frac{1}{128}$  oz., \$4.00;  $\frac{1}{124}$  oz., \$7.50;  $\frac{1}{32}$  oz., \$14.50;  $\frac{1}{126}$  oz., \$26.00;  $\frac{1}{36}$  oz., \$46.00;  $\frac{1}{4}$  oz., \$82.00.

# OTHER MULTIFLORAS

#### BLUE RIBBON

(A Ball Exclusive for 1959). A clear, violet-blue Multiflora Petunia identical in color to Blue Lustre. Very free flowering, and in our opinion, the finest blue Multiflora on the market today.

½ tr. pkt., \$1.25; tr. pkt., \$2.25; ½28 oz., \$4.00; ½4 oz., \$7.50; ½2 oz., \$14.50;  $\frac{1}{16}$  oz., \$26.00;  $\frac{1}{8}$  oz., \$46.00;  $\frac{1}{4}$  oz., \$82.00.

Brilliancy. Quite similar to Apache in its deep cerise-rose coloring but taller and more vigorous in growth. Makes a wonderful show for bedding.

Pink Beauty. A slightly deeper and clearer shade than Pink Sensation, and more dwarf

Prices above varieties (except Red Satin and Blue Ribbon), each: ½ tr. pkt., \$1.00; tr. pkt., \$1.75; 1/128 oz., \$3.50; 1/64 oz., \$6.50; 1/32 oz., \$11.70; 1/16 oz., \$20.00;  $\frac{1}{8}$  oz., \$35.00;  $\frac{1}{4}$  oz., \$60.00.







## Multifloras (F) HYBRID HYBRID

- Pink Sensation. One of the most vigorous, free flowering, fast growing Petunias we have ever seen. Light silvery pink. A very useful Petunia for bedding where a real show of color is wanted.
- Rose Charm. Rich, brilliant rose. Wonderfully vigorous, free branching and flowering. Somewhat procumbent in habit as compared with most Petunias, it forms a sort of "mat" or carpet of bloom in which one plant joins its neighbor.
- Satellite (New). Bright rose with a perfect white star. Far more brilliant than the old inbred variety, Twinkles, and very free flowering. This is the featured Pan-American novelty for 1959.
- Silver Medal. Medium large flowers of soft salmon-pink are lavishly produced on free-branching, semi-upright type plants. Here is an ideal shade for the trade which likes soft pastel colors.
- Starflight. The white, starred, deep velvety crimson of the popular Elk's Star in new Hybrid form. Vigorous, free flowering and very showy.

Yellow Gleam. Freely produced flowers of a medium yellow color paling to ivory-yellow in hot weather. The nearest approach to true yellow in Petunias.

Sugar Plum (New). Small flowers of bright orchid with deeper wine-red veins are freely produced on dwarf compact plants. Made an excellent show in our trials last summer. An outstanding novelty. Pictured on opposite page.



#### ● LINDA<sup>®</sup>

Brilliant rosy salmon flowers similar to Silver Medal are carried on bushy, solid plants of great vigor. Will withstand heavy wind and rain without plants breaking down. Somewhat more dwarf than Silver Medal.



## • GLITTERS

This fiery combination of bright scarlet-crimson and white draws plenty of attention wherever grown. Truly brilliant, and a "must" for bedding plant growers everywhere.

½ tr. pkt., \$1.35; tr. pkt., \$2.50; ½8 oz., \$4.50; ½6 oz.,
\$8.00; ½2 oz., \$15.50; ½6 oz., \$30.00; ½8 oz., \$57.00; ¼ oz., \$108.00.



The Indian Series is offered to help you to sell these free flowering, vigorous Multifloras as a group or series. They have somewhat similar height and plant shape, plant well together, bloom the same time. Let one Indian help sell another. Use Comanche to kick off the tribal procession!

- Apache. An intense deep cerise-rose similar in color to Inca, but without the gold
- Aztec. Bright scarlet-red with contrasting gold throat. A smaller flowered version of Fire Dance, but more vigorous in growth with blooms more freely produced.



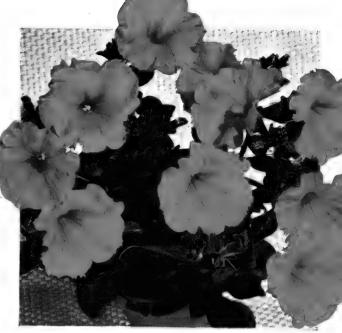
#### **● COMANCHE** =

This brilliant scarlet-red Hybrid Multiflora has become one of the most popular Petunias of all time. Ours is an improved strain from reselected parents and has performed outstandingly in our trials.

- Inca. Bright deep cerise-rose—about the color of Apache but with a lively, contrasting golden throat. Very appealing.
- Paleface. Pure white flowers with small creamy eye. This vigorous and free flowering variety is one of the best. Widely grown everywhere.
- Sioux. A deep, intense salmon shading toward red at throat. Midway between Linda and Comanche in color. Very vigorous and blooms profusely.
- Wonderland (Multiflora) Mixture, Our own formula mixture of the F<sub>1</sub> Hybrid Multifloras blended to provide a well balanced mixture of colors.

MULTIFLORA COLLECTION: One tr. pkt. each of Paleface, Blue Ribbon, Red Satin, Glitters, Linda, and Rose Charm (catalog value, \$12.25) for \$11.00.

Prices all above varieties (except Glitters): ½ tr. pkt., \$1.00; tr. pkt., \$1.75; 1/128 oz., \$3.50; 1/64 oz., \$6.50; 1/32 oz., \$11.70; 1/16 oz., \$20.00;  $\frac{1}{8}$  oz., \$35.00;  $\frac{1}{4}$  oz.. \$60.00.

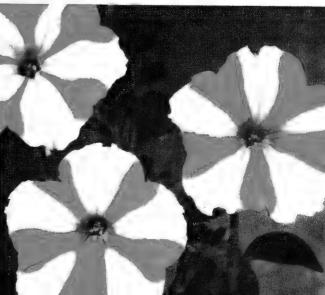


COMANCHE



LINDA

GLITTERS (Below)





PINK MAGIC The GLAMOUR Petunia-an outstanding bright pink.

# No Question About It!

Petunias are today's No. 1 seed grown bedding plant. In fact, we wouldn't be surprised if more were sold in our country each year than any other single species. What's the reason for this overwhelming popularity? Customer satisfaction-home gardeners really like them. They're easy to grow, don't have to be coddled, and give a real show for the money. And to top it all off, F1 Hybrids have all of the Petunia's good points in double measure!

#### Advantages of F1 Hybrids

- Greater vigor. Fast, strong growth is greatest single advantage of F1 Hybrids. More plant quicker-more blooms.
- New colors are possible from special parent combinations.
- Uniform plants come with F1 Hybrid seed. However, if you try to save seed from F<sub>1</sub> plants for the next season, you will lose the uniformity, and the desirable colors as well.

Considering the low percentage of seed cost compared to your total receipts for bedding plants, you can afford only the best. Sturdier, larger, more vigorous plants, greater uniformity, plus unique new colors combine to make an unbeatable combination to offer your customers. Small wonder that F1 Hybrids have made other Petunias almost obsolete!

# PINK and ROSE

Chiffon (New-A Ball Origination). This Petunia is almost identical to Pink Magic and possesses all its good qualities, but has flowers of a smooth, clear light pink color that varies slightly in intensity. We distributed seed samples and exhibited this variety in our trial grounds last year under the name of "Bon-Bon". Pictured on opposite page.

- Prima Donna. ALEAMERICA DISELECTION Large, heavily ruffled bright rose flowers with darker veins on vigorous, spreading, base-branching plants. Quite similar to the popular Ballerina except for color.
- Jumbo Rose. Extra large flowered, ruffled deep rose. This is a fine Petunia for pots and combinations, with flowers as large as Popcorn, a good bedding variety, too. Ball Orig. Seed.

Prices above 3, each: ½ tr. pkt., \$1.35; tr. pkt., \$2.50;  $\frac{1}{128}$  oz., \$4.50;  $\frac{1}{164}$  oz., \$8.00;  $\frac{1}{32}$  oz., \$15.50;  $\frac{1}{16}$  oz., \$30.00;  $\frac{1}{8}$  oz. \$57.00; ¼ oz., \$108.00.



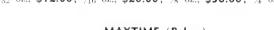


#### PINK MAGIC

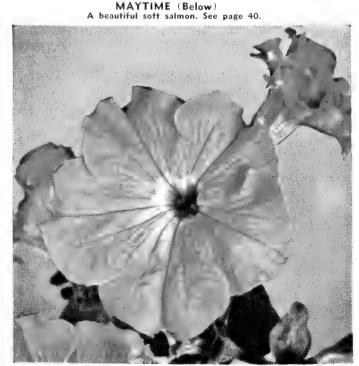
Early and free flowering, smooth bright pink. Unexcelled for pots, combinations or bedding. In just 2 years Pink Magic has won world-wide acclaim. Ask your fellow growers what they

 $\frac{1}{2}$  tr. pkt., \$1.35; tr. pkt., \$2.50;  $\frac{1}{128}$  oz., \$4.50;  $\frac{1}{46}$  oz., \$8.00;  $\frac{1}{32}$  oz., \$15.50;  $\frac{1}{46}$  oz., \$30.00;  $\frac{1}{8}$  oz., \$57.00;  $\frac{1}{4}$  oz., \$108.00.

• Flirt. Medium sized, clear light pink flowers are freely produced on vigorous, but fairly compact plants.  $\frac{1}{2}$  tr. pkt., \$1.00; tr. pkt., \$1.75;  $\frac{1}{2}$  oz., \$3.50;  $\frac{1}{6}$  oz., \$6.50;  $\frac{1}{32}$  oz., \$12.00;  $\frac{1}{16}$  oz., \$20.00;  $\frac{1}{8}$  oz., \$36.00;  $\frac{1}{4}$  oz., \$65.00.



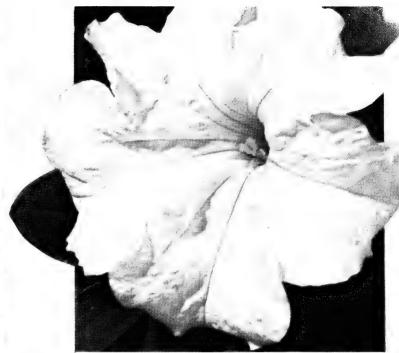




The dot ( • ) indicates varieties most dependably satisfactory in our experience and observation.



CHIFFON (New)
A new light pink—very free flowering.



WHITE MAGIC
The very best white—early and free-flowering

# (F) HYBRID

# F1 Hybrid Grandifloras

#### WHITE

• La Paloma. Large, well fringed flowers of purest white with yellow throat and remarkable vigor are the outstanding points about this fine Hybrid Petunia. ½ tr. pkt., \$1.35; tr. pkt., \$2.50; ½2 oz., \$4.50; ⅓4 oz., \$8.00; ⅓2 oz., \$15.50; ⅓6 oz., \$30.00; ⅓8 oz., \$57.00; ⅓4 oz., \$108.00.

**Snow Lady.** A medium large, fringed and ruffled white somewhat similar to La Paloma.  $\frac{1}{2}$  tr. pkt., \$1.00; tr. pkt., \$1.75;  $\frac{1}{12}$  oz., \$3.50;  $\frac{1}{164}$  oz., \$6.50;  $\frac{1}{32}$  oz., \$12.00;  $\frac{1}{16}$  oz., \$20.00;  $\frac{1}{8}$  oz., \$36.00;  $\frac{1}{4}$  oz. \$65.00



# • WHITE MAGIC =

Earliness, large ruffled Grandiflora blooms of pure white, heavy production of flowers and dwarf habit of growth are shared in this remark-

able Petunia. Ideal either in pots or for bedding. Ball Orig. Seed.  $\frac{1}{2}$  tr. pkt., \$1.35; tr. pkt., \$2.50;  $\frac{1}{128}$  oz., \$4.50;  $\frac{1}{16}$  oz., \$8.00;  $\frac{1}{32}$  oz., \$15.50;  $\frac{1}{16}$  oz., \$30.00;  $\frac{1}{3}$  oz., \$57.00;  $\frac{1}{4}$  oz., \$108.00.

# **BICOLORS**

Carioca (New—A Ball Origination). Large, beautifully fringed flowers, mottled and striped with rich wine-red and white, are prominently displayed on dense mounded plants.  $\frac{1}{2}$  tr. pkt., \$1.35; tr. pkt., \$2.50;  $\frac{1}{2}$ 0 oz., \$4.50;  $\frac{1}{2}$ 6 oz., \$8.00;  $\frac{1}{2}$ 9 oz., \$15.50;  $\frac{1}{2}$ 6 oz., \$30.00;  $\frac{1}{2}$ 9 oz., \$57.00;  $\frac{1}{2}$ 9 oz., \$108.00.



#### CRUSADER

Gaily striped, extra bright rose-pink on pure white with nicely fringed petals. Weather conditions and light intensity will sometimes affect the proportion of coloring in this, or any vari-

the proportion of coloring in this, or any varigated Petunia.  $\frac{1}{2}$  tr. pkt., \$1.35; tr. pkt., \$2.50;  $\frac{1}{1}$ 2 oz., \$4.50;  $\frac{1}{3}$ 2 oz., \$15.50;  $\frac{1}{1}$ 6 oz., \$30.00;  $\frac{1}{3}$ 8 oz., \$57.00;  $\frac{1}{4}$ 9 oz., \$108.00.

**Minstrel.** Large, ruffled flowers in various combinations of white and rich violet-blue.  $\frac{1}{2}$  tr. pkt., \$1.00; tr. pkt., \$1.75;  $\frac{1}{4}$ 28 oz., \$3.50;  $\frac{1}{4}$ 40 oz., \$6.50;  $\frac{1}{4}$ 20 oz., \$12.00;  $\frac{1}{4}$ 60 oz., \$20.00;  $\frac{1}{4}$ 8 oz., \$36.00;  $\frac{1}{4}$ 9 oz., \$65.00.

Sabre Dance (New). Extra large, ruffled flowers variegated bright crimson and white. Most flowers exhibit a white star pattern. Habit is compact but vigorous.  $\frac{1}{2}$  tr. pkt., \$1.35; tr. pkt., \$2.50;  $\frac{1}{128}$  oz., \$4.50;  $\frac{1}{16}$  oz., \$8.00;  $\frac{1}{32}$  oz., \$15.50;  $\frac{1}{16}$  oz., \$30.00;  $\frac{1}{3}$  oz., \$57.00;  $\frac{1}{4}$  oz., \$108.00.

## KE

• Fire Gleam. Medium sized, ruffled flowers of brilliant, creamy, cherry-red—a color that almost seems to glow as if lighted. ½ tr. pkt., \$1.00; tr. pkt., \$1.75; ½28 oz., \$3.50; ½6 oz., \$6.50; ½2 oz., \$12.00; ½6 oz., \$20.00; ½8 oz., \$36.00; ¼ oz., \$65.00.



# • TANGO =

A bushy plant with luxurious deep green foliage against which the large, bright salmon-scarlet flowers literally stand out like flares. Flowers are moderately fringed and ruffled, and are free-

ly produced. Makes a fine pot plant and is equally good for bedding.  $\frac{1}{2}$  tr. pkt., \$1.35; tr. pkt., \$2.50;  $\frac{1}{128}$  oz., \$4.50;  $\frac{1}{64}$  oz., \$8.00;  $\frac{1}{32}$  oz., \$15.50;  $\frac{1}{16}$  oz., \$30.00;  $\frac{1}{8}$  oz., \$57.00;  $\frac{1}{4}$  oz., \$108.00.





Gro. g. Ball

# F1 Hybrid Grandifloras-Continued

#### RED-Continued

Fire Dance. ALLAMERICA & SHECTION: This can best be described as a tangored with a rich golden throat. Fire Dance is a large fringed Grandiflora. <sup>1</sup>2 tr. pkt., \$1.35; tr. pkt., \$2.50; ½28 oz., \$4.50; ½4 oz., \$8.00; ½32 oz., \$15.50; ½6 oz., \$30.00; ½8 oz., \$57.00; ¼4 oz., \$108.00.



#### MATADOR

Medium large, ruffled, Grandiflora blooms of the popular, mahogany-red King Henry or Velvet Ball color. Makes a rich bedding show planted with white. *Ball Orig. Seed*.

15 tr. pkt., \$1.35; tr. pkt., \$2.50; ½28 oz., \$4.50; ½4 oz., \$8.00; ½2 oz., \$15.50; ½6 oz., \$30.00; ½8 oz., \$57.00; ½4 oz., \$108.00.

**Toreador** (New). Large, slightly ruffled flowers of solid, deep, velvety crimson-red are carried on uniform, compact plants.  $\frac{1}{2}$  tr. pkt., \$1.35; tr. pkt., \$2.50;  $\frac{1}{1}$ 28 oz., \$4.50;  $\frac{1}{6}$ 4 oz., \$8.00;  $\frac{1}{6}$ 50 oz., \$15.50;  $\frac{1}{1}$ 6 oz., \$30.00;  $\frac{1}{8}$ 6 oz., \$57.00;  $\frac{1}{4}$ 6 oz., \$108.00.

Scarlet Lustre (New). Large ruffled and fringed flowers of the same scarlet-red-gold throat color as Fire Dance, but a stronger grower and more disease resistant.

 $\frac{1}{2}$  tr. pkt., \$1.75; tr. pkt., \$3.00;  $\frac{1}{2}$  oz., \$5.50;  $\frac{1}{6}$  oz., \$10.00;  $\frac{1}{3}$  oz., \$19.00;  $\frac{1}{6}$  oz., \$36.00;  $\frac{1}{6}$  oz., \$69.00;  $\frac{1}{4}$  oz., \$129.00.

## SALMON



## ● BALLERINA 3

(Pictured below). Extra large, filled flowers of clear, intense salmon that hold their color well under summer sun. Plants are vicerous, and uniform.

vigorous and uniform. 12 tr. pkt., \$1.35; tr. pkt., \$2.50;  $\frac{1}{128}$  oz., \$4.50;  $\frac{1}{164}$  oz., \$8.00;  $\frac{1}{132}$  oz., \$15.50;  $\frac{1}{16}$  oz., \$30.00;  $\frac{1}{18}$  oz., \$57.00;  $\frac{1}{14}$  oz., \$108.00.



#### • MAYTIME

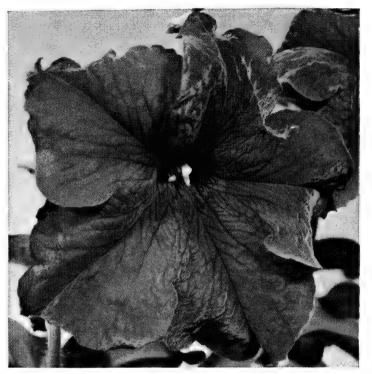
(All-America Winner for 1958). Pictured on page 38. This excellent F<sub>1</sub> Hybrid covers itself with large, ruffled Grandiflora type flowers of a soft salmon-pink shade.

Blooms are freely produced on dense, vigorous plants. A needed color in the Grandiflora class.

 $\frac{1}{2}$  tr. pkt., \$1.35; tr. pkt., \$2.50;  $\frac{1}{2}$ 02., \$4.50;  $\frac{1}{4}$ 6 oz., \$8.00;  $\frac{1}{2}$ 2 oz., \$15.50;  $\frac{1}{4}$ 6 oz., \$30.00;  $\frac{1}{8}$ 9 oz., \$57.00;  $\frac{1}{4}$ 9 oz., \$108.00.







BLUE LUSTRE
Delicately ruffled violet-blue.

• Fairyland. Medium large fringed and ruffled flowers of a soft shrimp-salmon shade; lighter than Ballerina. Vigorous and free blooming. ½ tr. pkt., \$1.00; tr. pkt., \$1.75; ½28 oz., \$3.50; ½4 oz., \$6.50; ½2 oz., \$12.00; ½6 oz., \$20.00; ½8 oz., \$36.00; ¼4 oz., \$65.00.

# **BLUE and PURPLE**

• Blue Lustre. (Pictured above). One of the finest clear violet-blue Petunias thus far. The medium large ruffled Grandiflora blooms are produced more freely than most blue Petunias, while the plant habit is uniform and bushy.

 $\frac{1}{2}$  tr. pkt., \$1.75; tr. pkt., \$3.00;  $\frac{1}{2}$  oz., \$5.50;  $\frac{1}{2}$  oz., \$10.00;  $\frac{1}{3}$  oz., \$19.00;  $\frac{1}{4}$  oz., \$36.00;  $\frac{1}{8}$  oz., \$69.00;  $\frac{1}{4}$  oz., \$129.00.

Blue Magic (New). Described by the originator as an  $F_1$  Hybrid Admiral with Admiral blue flowers up to 3 inches across. Growth habit is compact and vigorous and is easier to grow than Admiral.  $\frac{1}{2}$  tr. pkt., \$1.35; tr. pkt., \$2.50;  $\frac{1}{128}$  oz., \$4.50;  $\frac{1}{14}$  oz., \$8.00;  $\frac{1}{32}$  oz., \$15.50;  $\frac{1}{16}$  oz., \$30.00;  $\frac{1}{3}$  oz., \$57.00;  $\frac{1}{4}$  oz., \$108.00.

• Blue Mantle. Medium sized, ruffled flowers of rich violet-blue. Fairly dwarf, but erect plant with blooms well displayed.

½ tr. pkt., \$1.00; tr. pkt., \$1.75; ½128 oz., \$3.50; ½4 oz., \$6.50; ½32 oz., \$12.00; ½6 oz., \$20.00; ½8 oz., \$36.00; ¼4 oz., \$65.00.

**Lavender Lace.** Heavily fringed Grandiflora type flowers of warm lavender-rose with deeper heliotrope veins.

 $\frac{1}{2}$  tr. pkt., \$1.35; tr. pkt., \$2.50;  $\frac{1}{28}$  oz., \$4.50;  $\frac{1}{24}$  oz., \$8.00;  $\frac{1}{32}$  oz., \$15.50;  $\frac{1}{16}$  oz., \$30.00;  $\frac{1}{8}$  oz., \$57.00;  $\frac{1}{4}$  oz., \$108.00.

**Modesty** (New). Large, nicely fringed flowers of light lavender-blue.  $\frac{1}{2}$  tr. pkt., \$1.00; tr. pkt., \$1.75;  $\frac{1}{4}$ 28 oz., \$3.50;  $\frac{1}{4}$ 60 oz., \$6.50;  $\frac{1}{4}$ 90 oz., \$12.00;  $\frac{1}{4}$ 60 oz., \$20.00;  $\frac{1}{8}$ 60 oz., \$36.00;  $\frac{1}{4}$ 60 oz., \$65.00.

#### MIXTURES

# TEHYBRID GRAND BALL MIXTURE

Enough good  $F_1$  Hybrid Grandiflora Petunia varieties are now available to enable us to offer this carefully blended formula mixture which we make up ourselves. Contains both fringed and ruffled types.

½ tr. pkt., \$1.35; tr. pkt., \$2.50; ½2 oz., \$4.50; ½4 oz., \$8.00; ½2 oz., \$15.50; ½6 oz., \$30.00; ½ oz., \$57.00; ½ oz., \$108.00.

# GRANDIFLORA COLLECTION

One tr. pkt. each of Pink Magic, White Magic, Blue Lustre, Tango, Ballerina and Crusader (catalog value \$15.50) for \$14.00.

# Inbred Grandifloras

# RUFFLED VARIETIES

## Large-Flowered Petunias

There are 3 distinct classes of Grandifloras: the Ruffled, the Fringed and the Dwarf. Like all Inbred Petunias, the most vigorous are the tall ones. The Dwarf Grandifloras make ideal pot plants, but for bedding use the  $F_1$  Hybrids are generally more satisfactory.



#### BINGO

(Pictured below.) Huge flowers, up to 5 inches across, richly variegated wine-red and white are carried on vigorous plants. About half of the plants are somewhat smaller flowered (3 inches), but are equally color-

ful. An excellent item for combination boxes or bedding. Ball Orig. Seed. Tr. pkt., \$1.50;  $\frac{1}{16}$  oz., \$4.50;  $\frac{1}{16}$  oz., \$8.00;  $\frac{1}{16}$  oz., \$14.00;  $\frac{1}{16}$  oz., \$25.00;  $\frac{1}{14}$  oz., \$45.00.

**Carnival.** A colorful  $F_2$  mixture containing all shades found in the Grandiflora type. Carnival is an entirely different type of Petunia, neither  $F_1$  Hybrid nor Inbred. It is midway between the two types in vigor.  $F_2$  Petunia seed is saved from specially bred and selected  $F_1$  Hybrid varieties. Tr. pkt., \$1.50;  $\frac{1}{3}$ 2 oz., \$3.85;  $\frac{1}{1}$ 6 oz., \$7.00;  $\frac{1}{4}$ 4 oz., \$21.00; 1 oz., \$63.00.

#### - POPCORN

A Super-Dwarf Grandiflora White. If you like Snowstorm or White Queen for flower size, but find it a bit tall for certain uses, here is the answer—a really dwarf, large flowered white. Makes a wonderful plant for pots or combinations, and is equally at home for bedding. Tr. pkt., \$1.50;  $\frac{1}{16}$  oz., \$2.75;  $\frac{1}{16}$  oz., \$5.00;  $\frac{1}{16}$  oz., \$9.50;  $\frac{1}{8}$  oz., \$18.00;  $\frac{1}{4}$  oz., \$33.00.

Burgundy. Dark wine-red with large white throat.

Dwarf Pink Glory. Glowing carmine-rose with white throat.

• Elk's Pride Dwarf. Our strain of this always popular, rich velvety purple is admirably suited for bedding. Uniform.





**POPCORN** 

• Snowstorm. Fine, large flowered white.

Summer Night. Elk's Pride color but much more bushy and compact. Blooms later than most Petunias.

White Cloud. We offer the originator's strain.

- White Queen. Extra large, wavy, pure white flowers and vigorous growth make this a truly outstanding Petunia.
  - Ruffled Grandiflora Mixture. A well balanced formula mixture of above varieties in following proportions: 25% White; 25% Pink; 25% Purple: 12½% Mahogany-Red; 12½% Wine-red.

**Prices** above 10, each: tr. pkt., **85c**;  $\frac{1}{1}64$  oz., **\$1.90**;  $\frac{1}{32}$  oz., **\$3.40**;  $\frac{1}{16}$  oz., **\$5.75**;  $\frac{1}{8}$  oz., **\$11.00**;  $\frac{1}{4}$  oz., **\$20.00**.

# FRINGED GRANDIFLORAS

• Carmencita. Makes a nice pot plant. Medium size, well fringed, bright salmon-red flowers on dwarf, compact plants.

 $\frac{1}{2}$  tr. pkt., **85c**; tr. pkt., **\$1.50**;  $\frac{1}{2}$  oz., **\$3.50**;  $\frac{1}{2}$  oz., **\$6.00**.

Dazzler. Free flowering, deep carmine-rose. Extra early and dwarf. A fine pot plant variety.

Tr. pkt., 60c; ½64 oz., \$1.50; ½32 oz., \$2.75.

Fluffy Ruffles. An attractive fringed mixture for bedding work.

Tr. pkt., 85c; ½4 oz., \$1.90; ½2 oz., \$3.40; ½6 oz., \$5.75; ½ oz., \$10.50.

• Fringed Snowstorm. Nicely fringed, pure white flowers with faint gold throat are very freely produced. Good for either pots or bedding.

½ tr. pkt., 65c; tr. pkt., \$1.00; 1/64 oz., \$2.35; 1/32 oz., \$3.75; 1/46 oz., \$6.75.

Theodosia Improved. Extra large, heavily fringed flowers of brilliant glowing rose with golden yellow throat. Tr. pkt., 90c; ½,4 oz., \$1.80; ½,2 oz., \$3.30; ½,6 oz., \$6.00; ½ oz., \$11.00; ¼ oz., \$20.00.

• Fringed Grandiflora Mixture. A high class mixture made up of the best named varieties in the Fringed class

Tr. pkt., **85c**;  $\frac{1}{164}$  oz., **\$1.90**;  $\frac{1}{32}$  oz., **\$3.40**;  $\frac{1}{16}$  oz., **\$5.75**;  $\frac{1}{3}$  oz., **\$10.50**.

Gro. g. Ball

# Inbred Grandifloras-Continued

# **DWARF VARIETIES**

The following Petunia varieties seem admirably adapted to pot plant growth, but are not so universally useful for outdoor planting. So we have taken the liberty of listing them separately to indicate a special adaptability to growth in pots in the greenhouse in spring. Many of the Petunias listed on the preceding pages also make ideal pot plants. Check variety description for our recommendations.

- Carosel. Small, daintily fringed, but lavishly produced flowers of winepurple and white, are borne on compact, shapely plants. A very popular variety. ½ tr. pkt., 85c; tr. pkt., \$1.50; ½4 oz., \$3.50; ½32 oz., \$6.00.
- Lace Veil. Fringed, pure white flowers. Our present stock of Lace Veil is quite uniform and free flowering.

  Tr. pkt., 85c; ½4 oz., \$2.00; ½32 oz., \$3.50.

Little Giants, Pink Shades. Same habit as Little Giants Mixed but in various shades of pink.

Tr. pkt., \$1.00;  $\frac{1}{164}$  oz., \$1.75;  $\frac{1}{132}$  oz., \$3.00;  $\frac{1}{16}$  oz., \$5.50.

- Little Giants Mixture. Small, ruffled, California Giant type flowers are freely produced on low growing, uniform plants. Ideal for pots and combination work as well as bedding. Colors range from crimsonred through rose and pink to white.

  Tr. pkt., 75c; ½4 oz., \$1.50; ½32 oz., \$2.75; ½6 oz., \$5.00.
- Robin. Bred especially for use in pots or for combinations, but equally at home as a border plant. Plants are dwarf and compact, carrying their medium sized, ruffled flowers of rich, bright rose with white throats well above the foliage. Ball. Orig. Seed.

  1/2 tr. pkt., 85c; tr. pkt., \$1.50; 1/64 oz., \$3.50; 1/32 oz., \$6.00.



LITTLE GIANTS

Small, ruffled, California Giant type flowers are freely produced on low growing, uniform plants.

Setting Sun. Fringed deep rose; rather restricted growth. Tr. pkt., 85c; ½4 oz., \$2.00; ½2 oz., \$3.50.

• Dwarf Grandiflora Mixture (Dwarf Erfurt). A formula mixture of Dwarf Fringed varieties, including those mentioned in the pot plant types listed above. Tr. pkt., 85c; 1/44 oz., \$2.00; 1/32 oz., \$3.50.

# CALIFORNIA GIANTS

While none of the California Giants are  $F_1$  Hybrids, they continue to maintain their popularity to the fullest extent. Although these Petunias, and especially the Dwarf Giants, admittedly don't have the vigor of Hybrids, it's apparent that gardeners and gift buyers never seem to tire of the huge ruffled blooms with their exotic colors.

For pot plants Ball Dwarf Giant No. 1 is **the** variety. It's the most dwarf and earliest blooming California Giant. For a different color range, on somewhat taller plants, use Ball Dwarf Giant No. 2. Other strains listed below supply various single and blended colors. Sow December 15 for heavy 3-inch plants for Mother's Day, and January 10 to produce blooming 3-inch for late May bedding sales.

BALL DWARF GIANT No. 1

About 90% very large flowers, in orchid, rose and red shades, and bicolors. Throws its first flower very early—easy to flower in pots or "paks" for bedding. Has the most dwarf, compact growth of all California Giants. Flowers are larger than other varieties in this class, with delicately netted throats and heavily ruffled petals. This is the finest Giant Petunia for spring pots, and for bedding sales. We maintain the high standard by yearly trial and selection at West Chicago.

Separate Colors of Ball Dwarf Giant No. 1. All possess the same desirable dwarf early flowering with 90% large flowers as the Mixture above.

Orchid Rose-red Rose and White

Prices above 4, each:  $\frac{1}{2}$  tr. pkt., \$1.00; tr. pkt., \$1.75;  $\frac{1}{64}$  oz., \$2.75;  $\frac{1}{62}$  oz., \$5.00;  $\frac{1}{16}$  oz., \$9.50;  $\frac{1}{8}$  oz., \$18.00;  $\frac{1}{4}$  oz., \$34.00.

• Ball Dwarf Giant No. 2—For Bedding. Some growers prefer this strain for bedding use because it is somewhat more vigorous in growth and includes some pink and copper shades which it is impossible to breed into the extra dwarf, early blooming Ball Dwarf Giant No. 1 strain.

Ramona. Large, open throated flowers about half rose, balance pink and lavender. Bred especially for pots and combinations.

Prices above 2, each:  $\frac{1}{2}$  tr. pkt., \$1.00; tr. pkt., \$1.75;  $\frac{1}{64}$  oz., \$2.75;  $\frac{1}{32}$  oz., \$5.00;  $\frac{1}{4}$  oz., \$9.50;  $\frac{1}{8}$  oz., \$18.00;  $\frac{1}{4}$  oz., \$34.00.

California Giants Mixture No. 5. A very complete and attractive mixture of colors in the tall Giant class. Free flowering for bedding.

Tr. pkt., 75c;  $\frac{1}{64}$  oz., \$1.35;  $\frac{1}{32}$  oz., \$2.50;  $\frac{1}{16}$  oz., \$4.50.

California Giant—Supreme Florists' Strain. Fine bedding mixture in soft shades of pink, rose and salmon. Tr. pkt., \$1.00; 1/4 oz., \$1.75; 1/32 oz., \$3.00; 1/16 oz., \$5.50.

• Multibloom Mixture. Where summer heat is not too intense or prolonged, this strain is bushier and more free flowering, when used for bedding, than the regular No. 1 or No. 2 strains. Typical California Giant flower size and color range.

1/2 tr. pkt., \$1.00; tr. pkt., \$1.75; 1/64 oz., \$2.75; 1/32 oz., \$5.00; 1/16 oz., \$9.50; 1/8 oz., \$18.00; 1/4 oz., \$34.00.

Giant Rainbow Strain. Excellent mixture.

Tr. pkt., \$1.00; \(\frac{1}{64}\) oz., \$1.85; \(\frac{1}{32}\) oz., \$3.25; \(\frac{1}{16}\) oz., \$5.75.



BALL DWARF GIANT No. 1

This is the finest Giant Petunia for spring pots, and for bedding sales. Over 90% very large flowers, in orchid, rose and red shades, and bicolors.

# SEPARATE COLOR CALIFORNIA GIANTS

White Giant. Pure white petals with yellow throat.

Copper-Red, Dark. Attractive deep coppery crimson.

Glamour. A beautiful rich salmon-rose.

Prices above 3, each: tr. pkt., \$1.75; \( \frac{1}{64} \) oz., \$2:75; \( \frac{1}{32} \) oz., \$5.00.

# Dwarf Bedding Petunias

Grog Ball

(Inbreds)

# THE 10 BEST DWARF BEDDING VARIETIES ARE INDICATED BY DOTS

Each year on the basis of reports from customers, as well as from our own flowering trials, we revise our recommended list of 10 best varieties. It should be noted that this list does not include the F<sub>1</sub> Hybrids, as we have placed these varieties in a "class by themselves".

#### ADMIRAL=

This is one of our finest blue Petunias. Large, attractively ruffled flowers; clear bright velvety blue. Ideal for either pots or bedding. Tr. pkt., 80c; 1/64 oz., \$1.65; 1/32 oz., \$2.90; 1/16 oz., \$5.25; 1/38 oz., \$9.50.

Blue Bedder. Vigorous growing, large flowered mid-blue. Tr. pkt., 40c; 1/4 oz., \$1.35; 1 oz., \$4.25.

#### ● CELESTIAL ROSE IMPROVED =

Bright rose-pink. Unexcelled for pot plant work or bedding. Our strain has been unsurpassed in the florist trade for over 25 years. Tr. pkt., 60c; ½ oz., \$1.15; ¼ oz., \$2.00; 1 oz., \$6.50.

Cheerful. Medium large, star-shaped flowers of clear salmon are freely produced on uniform, fairly dwarf plants.
 Tr. pkt., 75c; ½6 oz., \$2.00; ½ oz., \$3.75; ½ oz., \$6.00.

Cream Star. Star-shaped, creamy white. Tr. pkt., 50c; ½ oz., \$1.25; ¼ oz., \$2.25.

• Elk's Star. Deep velvety crimson with white star. Tr. pkt., 60c; ½6 oz., \$1.80; ½ oz., \$3.30; ¼ oz., \$6.00.

Fair Lady. Light pink. For flat sales and bedding we recommend Pink Sensation which is more vigorous and uniform. Tr. pkt., 60c; ½ oz., \$1.40; ½ oz., \$2.50; ½ oz., \$4.25.

• Fire Chief. ALLAMERICA GIHECTION? Newly opened flowers are a true scarlet-red, turning to deep salmon-rose with age.

Tr. pkt., 50c; ½6 oz., \$1.65; ½8 oz., \$2.90; ¼ oz., \$5.00; 1 oz., \$15.00.

**Glow.** Bright rose-red flowers are produced in abundance on dense growing, vigorous plants of uniform habit. Tr. pkt., 50c;  $\frac{1}{16}$  oz., 1.25;  $\frac{1}{8}$  oz., 2.00;  $\frac{1}{4}$  oz., 3.75; 1 oz., 1.25;

Heavenly Blue. See Sky Chief.

Igloo. White. Extra dwarf, well shaped plant. Clean, bushy habit. Tr. pkt., 60c; ½ oz., \$1.15; ¼ oz., \$2.00; 1 oz., \$6.50.

King Henry. See Velvet Ball.

**Lipstick.** Bright cerise-rose flowers faintly shaded salmon, with white throat, are carried on fairly dwarf plants of uniform size. Tr. pkt., 50c; ½6 oz., \$1.65; ½ oz., \$2.90; ½ oz., \$5.00.

Moonstone. (Nearest to yellow). This F₂ Petunia is vigorous in growth with freely produced Multiflora type flowers of light ivory-yellow. Blends well with purples and blues.
Tr. pkt., \$1.00; ½₂ oz., \$3.50; ½₁6 oz., \$6.50; ⅓ oz., \$12.00.

Rosy Morn. Popular rose-pink with large white throat. Tr. pkt., 50c; ¼ oz., \$1.50; 1 oz., \$5.25.



CELESTIAL ROSE IMP.

- Sky Chief. Clear light blue; a bit lighter than Heavenly Blue, and more dwarf in growth.

  Tr. pkt., 60c; ½ oz., \$1.80; ¼ oz., \$3.30; 1 oz., \$9.90.
- Snowball Imp. Pure white. Compact and uniform, yet vigorous. Tr. pkt., 50c; ¼ oz., \$1.80; 1 oz., \$5.40.
- Topax Queen. A remarkable color combination of glowing carminerose with distinct orange-scarlet overtones. Tr. pkt., 50c; ⅓ oz., \$1.00; ⅓ oz., \$1.75; 1 oz., \$6.00.

**Twinkles.** Very showy rose-pink with white star. Uniform growth and markings. Tr. pkt., 60c; ½ oz., \$1.70; ½ oz., \$3.00; 1 oz., \$9.00.

• Velvet Ball. Dark red; almost identical to King Henry in color but more spreading in growth and better adapted for bedding use. Tr. pkt., 75c; ½ oz., \$1.50; ½ oz., \$2.75; ½ oz., \$5.25; ¼ oz., \$10.00.

Violacea. Deep purple. Tr. pkt., 40c; ¼ oz., \$1.40.

#### BEST FORMULA MIXTURE

We mix this ourselves, blending the best of the above varieties in proportions pleasing to the eye. Fine for spring flat or pak sales. Tr. pkt., 50c;  $\frac{1}{16}$  oz., \$1.00;  $\frac{1}{8}$  oz., \$1.85;  $\frac{1}{4}$  oz., \$3.50; 1 oz., \$10.00.

**Dwarf Bedding Mixture.** A blend of good bedding varieties. Tr. pkt., **50c**; ½ oz., **\$1.50**; 1 oz., **\$4.50**.

Dwarf Bedding Starred Mixture. Nice mixture of starred types. Tr. pkt., 75c;  $\frac{1}{4}$  oz., \$3.00; 1 oz., \$9.00.

**COLLECTION:** For growers who are interested in trying all the 10 Best Varieties separately rather than in a mixture, we offer a tr. pkt. of each of the named dotted varieties for \$5.75.

# MISCELLANEOUS PETUNIAS

# THE BALCONIES

# TALL BEDDING

Strong growers of spreading or semi-trailing habit.

Black Prince. Deep velvety crimson-red.

White Royal Rose Blue

Mixture

**Prices** above 5, each: tr. pkt., 40c;  $\frac{1}{8}$  oz., 1.25;  $\frac{1}{4}$  oz., 2.25; oz., 2.

Taller and stronger growers than the Dwarf class.

Howard's Star Imp. Medium tall, velvety crimson with large white star in each flower.

Tr. pkt., 40c;  $\frac{1}{8}$  oz., 1.25;  $\frac{1}{4}$  oz., 2.25; 1 oz., 6.75.



# **PHYSALIS**

PERENNIAL

(P. Alkekengi) 18,000 S. 3-4 weeks 65-75°

Francheti (Chinese Lantern Plant), 2 ft. Giant orange-scarlet pods. Tr. pkt., 30c; ¼ oz., 80c; 1 oz., \$2.50.

Pinks. See Dianthus, page 18.

# PLATYCODON (Balloon Flower)

**PERENNIAL** (P. grandistorum).

28.000 S. 2-3 weeks 65-75°

Very attractive garden perennial, 2 ft.

Blue. A clear, deep violet-blue. Tr. pkt., 40c; ½ oz., 90c; ¼ oz., \$1.60.

## **PLUMBAGO**

ANNUAL (P. capensis).

2000 S. 3-4 weeks 65-75°

1½-inch flowers are borne on terminal spikes.

Blue. Clear azure-blue. 100 seeds, 90c; 1000 seeds, \$8.00.

# POPPY (Papaver)

ANNUAL (Papaver nudicaule)

S. See below 1-2 weeks 65-75°

ICELAND. 275,000 S. 1 ft. The standard type for spring greenhouse forcing. Sow direct either in beds or pots. Quick growing for borders.

Sandford's Giants. A fine, brilliantly colored mixture.

Tr. pkt., 35c; ¼ oz., \$1.25; 1 oz., \$3.75.

SHIRLEY (P. rhoeas). 70,000 S. 2 ft.

Double Mixture. Tr. pkt., 25c; 1/4 oz., 75c; 1 oz., \$2.25.

**PERENNIAL** (P. orientale)

140,000 S. 1-2 weeks 65-75°

ORIENTAL POPPY. 3 ft. Large, cup-shaped flowers with crinkled petals. Newly opened flowers when cut in early morning or late evenings will keep in water 3 to 5 days if ends of stems are well burned within 5 minutes of cutting.

Beauty of Livermere. Dark oxblood-red.

Brilliant. Vivid fiery red.

Salmon Shades. Huge blossoms in unusual salmon shades.

Mixture of all colors.

Prices above 4, each: tr. pkt., 40c; \(\frac{1}{4}\) oz., \$1.20; 1 oz., \$3.60.

# PORTULACA (Moss Rose)

ANNUAL (P. grandiflora)

280,000 S. 2-3 weeks  $65-75^{\circ}$ 

6 in. Very popular and showy bedding plant. While easily grown from seed direct sown in garden, your customers will eagerly buy young plants in bloom.

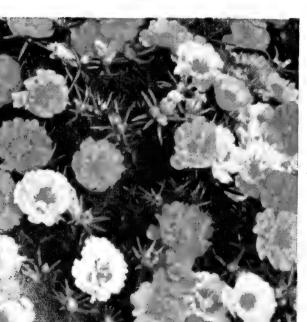


#### DOUBLE MIXTURE

This is an unusually choice and wonderfully showy mixture of brilliant colors. Produces 85 to 90% true double flowers, A special imported strain.

Tr. pkt., 30c; 1/4 oz., \$1.25; 1 oz., \$3.75.

Single Mixture. Tr. pkt., 25c; ¼ oz., 70c; 1 oz., \$2.35. Single Jewel. Extra large flowers of glowing crimson. Tr. pkt., 50c; ¼ oz., \$1.50; 1 oz., \$4.50.



PORTULAÇA DOUBLE MIXED

One of our Sweet Sixteen varieties for 1959.

# **PRIMULA**

# MALACOIDES

ANNUAL (P. malacoides)

385,000 S. 3-4 weeks 65-75°

Malacoides Primulas are of easy culture if they are grown in an airy, cool house (45° night temperature) and not allowed to get dry between waterings. Equally important is the avoidance of fertilized soil in the seed flat or early stages of growth.

Seed may be sown from May until October for early spring blooming in various pot sizes.

- Brightness. The first F<sub>2</sub> Primula ever offered! Flowers are a rich, luminous, deep rose and, as observed in our trials, Brightness was "head and shoulders" above any other variety in uniformity, vigor and profusion of blooms. A genuinely outstanding Primula. Tr. pkt., \$1.25.
- Glory of Riverside Imp. An excellent variety with freely produced, beautiful salmon-rose flowers.

White Giant. Fine pure white; large flowers and heavy stems.

Brilliancy Imp. Large flowers of rich wine-red.

Mrs. Eriksson of Riverside. Large flowers of glowing rose-red on compact plants of medium height.

Ball Lavender. Bright orchid-lavender.

Mixture. Our own balanced formula mixture.

Prices above 6, each: tr. pkt., \$1.25;  $\frac{1}{64}$  oz., \$2.75;  $\frac{1}{32}$  oz., \$5.25.

• Red Velvet. Newly opened flowers are a bright coral-rose changing to deep, velvety crimson-red as they mature. Tr. pkt., \$1.50; ½28 oz., \$2.50.

## **OBCONICA**

ANNUAL (P. obconica).

130,000 S. 3-4 weeks 65-75°

Large flowered and showy pot plants, A favorite for many years. Sow from January on for Christmas and later. The following strains are produced by the world's leading specialists.

- Fasbender's Red. An outstanding extra large flowered deep crimson-red.
- Mueller's Berlin Rose (Mueller's Rosea). Soft medium rose.

Salmon-Rose (Lachsrosa), Salmon-rose shades, Sky-Blue (Coerulea), Clear mid-blue,

White. Large, clean flowers.

Formula Mixture. Carefully blended from above colors.

Prices above 6. each: tr. pkt., \$1.25; \(\frac{1}{64}\) oz., \$2.75; \(\frac{1}{32}\) oz., \$5.00.

## CHINENSIS (Chinese Primula)

ANNUAL (P. chinensis)

18,000 S. 3-4 weeks 65-75°

A popular pot plant with many retail growers. Very colorful and showy. Sow from March on for Christmas and later.

Special Mixture. A choice assortment of colors.

Tr. pkt., \$1.25; ½2 oz., \$3.75.

# HARDY VARIETIES

PERENNIAL (P. veris)

25,000 S. 3-6 weeks 65-75°

A very useful class for spring pot work or as garden subjects. Plants lifted from outdoors in fall will make specimen pot plants from February on, 6 to 12 in.

● Colossea. 33,000 S. Extra large flowers (1½ to 2 in.) on long, stiff stems. Remarkable range of unusual colors.

Tr. pkt., \$1.25; ½ oz., \$3.00; ½ oz., \$5.25; 1 oz., \$17.00.

Giant Munstead Strain. The standard strain for bedding; in shades of yellow. Tr. pkt., \$1.25; ½ oz., \$3.00; ½ oz., \$5.25; 1 oz., \$17.00. Polyanthus Mixture (Unwin's strain).

Tr. pkt., 1.00; 1/8 oz., 2.25; 1/4 oz., 4.25; 1 oz., 12.50.

 Pacific Giants Mixture. The clearer colors, larger flowers and longer stems of this fine blend make it a distinct improvement over older strains. Wide color range.

## OTHER HARDY PRIMULAS

# • DENTICULATA

Large heads of ball-shaped flowers. Colors vary from white to deep rosy lilac. Tr. pkt., \$1.00; ½6 oz., \$2.40; ¼ oz., \$9.00.

• Giant Monarch Strain. A fine large-flowered Auricula bicolored mixture. Tr. pkt., \$1.25; ½ oz., \$3.00; ¼ oz., \$5.25; 1 oz., \$17.00.

Japonica. Crimson, rose and pink flowers borne in whorls on 6- to 9-in. stems. Tr. pkt., 60c; ½ oz., \$1.80; ½ oz., \$5.40.



SUPER-DWARF, COMPACT FIREBALL

DWARF EARLY, ST. JOHN'S FIRE

MEDIUM TALL MIDSEASON, BLAZE OF FIRE

# **SALVIA**

ANNUAL (S. species)

7500 S. 2-3 weeks 65-75°

SPLENDENS (Scarlet Sage), This strikingly colorful, brilliant scarlet annual is popular wherever bedding plants are grown. Be sure to include some of the newer dwarf varieties for your customers, too. The following are listed according to flowering date—earliest first. (Sown April 1st in Chicago). Effective planted with white Petunias or with a background of evergreens. NOTE: Salvia is especially sensitive to methyl bromide treated soil.

# **EXTRA DWARF**

## • FIREBALL

An earlier, more dwarf Salvia which should find abundant use where extra early blooming and more dwarf habit is wanted. Fireball has a unique base-branching, almost spreading habit, and will bloom profusely and continually until frost. Blooms early (June 20) making flatted Salvia sell on sight! Also sells well in pots or paks—first flowers 10 weeks from sowing. 10 inches tall. Tr. pkt., \$1.25; ½ oz., \$2.20; ½ oz., \$4.00; 1 oz., \$12.00.

# **DWARF** (Early)



# ●ST. JOHN'S FIRE

June 25. The most popular dwarf Salvia. About 12 inches high.

Tr. pkt., \$1.00; ½ oz., \$1.65; ¼ oz., \$2.75; ½ oz., \$5.00; 1 oz., \$9.00; 4 ozs., \$30.00.

• Blaze of Fire. June 30. The standard medium early strain. Closely follows St. John's Fire in flowering. 14 to 16 in.

Tr. pkt., 85c; ¼ oz., \$2.25; ½ oz., \$3.85; 1 oz., \$7.25; 4 ozs., \$24.00.

#### MEDIUM (Midseason)

• Firebrand (Early Harbinger). July 10. 18 in, Between Blaze of Fire and America in earliness of flowering, Remains in full flower throughout the summer.

Tr. pkt., 85c;  $\frac{1}{4}$  oz., 2.25;  $\frac{1}{2}$  oz., 3.85; 1 oz., 7.25; 4 ozs., 24.00.



#### AMERICA

(Globe of Fire). July 23, 20 in. This is our uniformly true and even stock of this fine variety. Follows Firebrand in flowering date. Popular for background planting.

Tr. pkt., 65c; ¼ oz., \$2.00; 1 oz., \$6.00; 4 ozs., \$20.00.

#### TALL (Late)

• Bonfire. July 25, 26 in. Medium tall, very even. Popular for background planting.

Tr. pkt., 65c;  $\frac{1}{4}$  oz., \$1.50; 1 oz., \$5.25; 4 ozs., \$17.50.

Clara Bedman. July 25. A very free flowering, medium tall strain. Similar to Bonfire. Originator's Seed.

Tr. pkt., 65c;  $\frac{1}{4}$  oz., \$2.00; 1 oz., \$6.00; 4 oz., \$2.00.

**Splendens Tall.** August 12.  $2\frac{1}{2}$  ft. The original late flowering species. Tr. pkt., 45c;  $\frac{1}{4}$  oz., \$1.40; 1 oz., \$4.50; 4 ozs., \$15.00.

# **OTHER COLORS**

White Fire. June 24. 12 in. A creamy white Salvia, similar in habit to St. John's Fire.

Tr. pkt., \$1.00;  $\frac{1}{8}$  oz., \$3.00;  $\frac{1}{4}$  oz., \$5.00; 1 oz., \$15.00.

Rose Flame. August 7. 20 in. Coral-pink calyx surrounding the deeper rose petal tube. Tr. pkt., 75c; ½ oz., \$2.00; 1 oz., \$6.00.

Barbara. June 25. Pink with orange corolla, About 12 inches high. Tr. pkt., \$1.00; ½ oz., \$3.50.

FARINACEA (Blue Salvia), 24,000 S.



#### • ROYAL BLUE

July 1. 3 ft. This is our own reselected strain, grown especially for us from an entirely new selection. Color is a true deep blue. We highly recommend this.

Tr. pkt., 50c; ½ oz., \$1.45; 1 oz., \$5.00.

HORMINUM (Foliage Plant), 9500 S.

• Pink Sundae. July 15. 14 in. Bushy, base-branching plants sending up many stems, each terminating in a cluster of bright pink leaves in the same manner as a Poinsettia. Very attractive, novel, and easy to grow. Tr. pkt., 30c; ¼ oz., 90c; 1 oz., \$2.70.

PERENNIAL (S. patens)

3800 S. 2-3 weeks 65-75°

Patens (Gentian Sage). 2½ ft. Deep, bright blue, hardy Salvia. Tr. pkt., 75c; ¼ oz., \$2.00; 1 oz., \$6.00.



# PYRETHRUM (Painted Daisy)

(P. roseum) PERENNIAL

18,000 S. 1-2 weeks 65-75°

2 ft. Long prized as a source of summer cut flowers. Will make an excellent showing with a minimum of care.

● James Kelway. Best deep crimson.

Robinson's Dark Crimson. Giant flowered, dark red.

Rose. Single pink flowers.

• Robinson's Mixture. Large single mixture.

Prices above 4, each: tr. pkt., 60c; 1/4 oz., \$1.50; 1 oz., \$4.75.

Double Yellow Double Pink Double White

Double Pyrethrum seed does not produce 100% double flowers-the percentage is better the second season.

Prices above 4, each: tr. pkt., 50c;  $\frac{1}{16}$  oz., \$1.50;  $\frac{1}{4}$  oz., \$4.50.

• Double Mixture. The percentage of large flowers, with double row of petals, exceeds that of any other strain. Note, however, that 2 years' growth is required to produce the finest flowers in any double Pyrethrum. Tr. pkt., 60c; ½ oz., \$1.50; ¼ oz., \$2.75; 1 oz., \$8.25.

# QUEEN ANNE'S LACE FLOWER

ANNUAL (Daucus carota)

36,500 S. 2-3 weeks 65-75°

2 ft. Large heads of lacy white flowers. Nice filler for basket work. Tr. pkt., 25c; ¼ oz., 60c; 1 oz., \$1.80.

RANUNCULUS (Buttercup)

ANNUAL (R. asiaticus). 5700 S. 3-5 weeks 65-75°

Giant Mixture. 18 in. Double flowers in shades of yellow, orange, red, blue and white.

Tr. pkt., 50c; 1/8 oz., \$1.10; 1/4 oz., \$1.90; 1 oz., \$6.00.

# **RICINUS** (Castor Bean)

S. See below 2-3 weeks 65-75° ANNUAL (R. communis) Very fast growing, tall, large-leaved plants. Good for tall hedges and windbreaks.

Crimson Spire. 75 S. 8 ft. Bronzy red foliage with crimson stems and red fruit. 1 oz., 45c; 4 ozs., \$1.40; 1 lb., \$4.50.

Zanzibariensis Mixture. 25 S. 10 ft. Foliage bright green. 1 oz., 30c; 4 ozs., \$1.00; 1 lb., \$3.00.

# ROSES FROM SEED

PERENNIAL (Rosa polyantha)

Polyantha (New), 9 to 12 in. These delightful little Roses are easily raised from seed, and may be had in flower within 3 months from sowing. Young plants will bloom right through the summer in pots or window boxes and will continue year after year with a minimum of attention. Single, semi-double and double blooms in shades of pink and rose.

100 seeds, **85c**; 500 seeds, **\$3.50**.

# RUDBECKIA (Coneflower)

ANNUAL (R. hirta)

85.000 S. 2-3 weeks 65-75°

A very free flowering bedding plant. Valuable for cutting.

• Gloriosa Daisies. 3 ft. This tetraploid Rudbeckia produces large, single flowers up to 6 inches across in shades of yellow and mahogany-red.  $\frac{1}{32}$  oz., 85c;  $\frac{1}{16}$  oz., \$1.50;  $\frac{1}{4}$  oz., \$4.50.

Starlight. 2½ ft. The only Rudbeckia strain we have seen that actually produces fully double, Dahlia-like flowers. An attractive mixture of yellow, orange and brown shades flowering on long stems; flower type ranges from nearly single to fully double.

Tr. pkt., 35c; ½ oz., \$1.00; ½ oz., \$1.75; 1 oz., \$5.25.

PERENNIAL (Echinacea purpurea)

7000 S. 2-3 weeks 65-75°

Purpurea. 4 ft. Reddish purple flowers. Tr. pkt., 35c; ¼ oz., \$1.00; 1 oz., \$3.50.

# SAINTPAULIA (African Violet)

ANNUAL (S. ionantha) 750,000 S. 3-4 weeks 65-75°

Nice 3-inch pots of this extremely popular plant can be grown from seed in 6 to 8 months, if care is exercised in germination. Handle about like Begonia seed. Uniform moisture, a 65° temperature, plenty of soil organic matter, and protection from bright sun are necessary in growing good Saintpaulias.

• Blue Fairy Tale. Extra free blooming and fast growing. Bright blue flowers.

Tr. pkt., \$2.00;  $\frac{1}{128}$  oz., \$15.00.

Single Mixture. A choice, large flowered mixture of colors in many attractive shades. 300 seeds, \$2.00.

Pink Shades. A large portion of various pink shades is included in this strain.

Tr. pkt. (300 seeds), \$3.00.

Try starting Saintpaulias in Jiffy-Pots, Jiffies will protect the root ball when shifting to more decora-tive containers or planters.

SAINTPAULIA

White. 50% true white-balance blue-eyed. Various foliage types. 300 seeds, \$2.50.

• Double Mixture. 40% double and semi-double—balance single. All colors and foliage types are represented here. 300 seeds, \$3.00.

# **SALPIGLOSSIS**

ANNUAL (S. sinuata superbissima) 125,000 S. 2 weeks 65-75° Salpiglossis furnishes cut flower material either from a January-February sowing indoors or a later one grown outdoors. Colorful, 2½-in., funnelshaped flowers.

Emperor Mixture. 2½ ft. Tall, for cutting. All colors.

Dwarf Giant Flowered Mixture. 20 in. For bedding and borders. All colors.

Prices above 2, each: tr. pkt., 25c; 1/4 oz., 60c; 1 oz., \$1.80.

# BALL PLASTICOVER

Here's a proven idea to simplify your germination problems. The Ball Plasticover is a light gauge flexible plastic tube that fits completely around seed flats. Seeds protected by a Plasticover seldom need additional watering before germination.

To use the Plasticover, sow the seed in your usual way and water thoroughly. Then cut off a piece of the tubing long enough to slip over the flat and fold under at each end. Leave the Plasticover on until the seeds are well up, then remove and continue normal culture.

Plasticovers work the year around-they help you get the same even germination winter, spring and summer,

PRICE: Per roll, 20 inches in diameter, 100 feet long, \$5.00 net, prepaid.



# VIBRA-SEEDER

Many gadgets for hand sowing of seeds have been tried by our growers. We always come back to the Vibra-Seeder. No parts to change, takes all sizes and shapes of seeds with the same easy vibrating action, which assures an even flow of seed and ultimately an even stand of seedlings. Flashlight batteries not included. Price: \$2.50 net, prepaid.



# SANVITALIA

ANNUAL (S. procumbens)

50,000 S. 1-2 weeks 65-75°

Procumbens (Creeping Zinnia). 4 to 6 in. A very fine, dwarf border plant with many small yellow flowers. Tr. pkt., 30c; ¼ oz., 90c; 1 oz., \$2.70.

# SAPONARIA

**PERENNIAL** (S. ocymoides)

5500 S. 2-3 weeks 65-75°

Ocymoides. 9 in. Trailing rock plants; rose-pink flowers. Tr. pkt., 30c; 1/4 oz., 75c; 1 oz., \$2.25.

# **SCABIOSA** (Pincushion-Flower)

ANNUAL (S. atropurpurea)

4500 S. 2-3 weeks 65-75°

Tall. 2 to 3 ft. No retail grower should be without some Scabiosas for spring greenhouse or outdoor summer cutting. They're long-stemmed and free flowering with a variety of pleasing colors to choose from.

- Shasta Improved. Fine pure white.
- Oxford Blue. Somewhat darker than Blue Moon, Extra large flowers on fine, long stems.
- Loveliness. Extra large flowered, deep salmon-pink.
- Blue Moon. Fine lavender-blue color with extra large flowers on long. wiry stems. The standard market color.

Prices above 4, each: tr. pkt., 25c; \( \frac{1}{4} \) oz., 75c; \( \text{l oz., \$2.25} \).

#### ● GIANT MIXTURE=

A special strain containing only the new large flowered varieties. Well balanced in good cut-flower colors. Use this mixture if you want only a small planting of Scabiosa for cutting. Tr. pkt., 25c; ¼ oz., 75c; 1 oz., \$2.25.

DWARF CLASS. For bedding and garden work.

Tom Thumb Mixture. 10 in. Extra dwarf and compact plants for bedding and edging. Tr. pkt., 25c; 1/4 oz., 75c; 1 oz., \$2.25.

PERENNIAL (S. caucasica)

2400 S. 2-3 weeks 65-75°

Excellent large flowered perennial cut-flower material. Seed germination sometimes slow. Flower heads up to 3 in. across. 2½ ft.

Goldingensis. Large flowered, fine deep lavender. Tr. pkt., 60c; ¼ oz., \$1.75; 1 oz., \$5.25.

◆ House Mixture. Large flowers ranging from white to deep blue. Tr. pkt., 45c; ¼ oz., \$1.35; 1 oz., \$4.00.

## SEDUM

PERENNIAL (S. species)

400,000 S. 3-4 weeks 65-75°

Golden Carpet (Acre). 3 in. A very nice extra dwarf evergreen. Small light yellow flowers produced in June. Very strong, hardy grower. Tr. pkt. (3000 seeds or more), 50c.

Rock Garden Blend. Many species with various colors and forms make up this interesting mixture. Tr. pkt. (3000 seeds or more), 50c.

# **SCHIZANTHUS** (Butterfly Flower)

60,000 S. 1-2 weeks 65-75°

These easily grown plants literally cover themselves with a brilliant mass of showy blooms. A January sowing will produce nice 3-inch plants for spring combinations. Sow September to November for larger pot plants and spring cut flowers.

- Ball Giant Flowered. Extra large flowers (often 2 inches in diameter) and unuusally brilliant colors. Nice for cutting or makes a choice pot plant if pinched.
- Ball Dwarf Mixture. A distinctly dwarf growing strain with large, compact heads of medium sized flowers. Makes an excellent pot plant. Prices above 2, each: tr. pkt., 60c; ½ oz., \$1.80; ¼ oz., \$3.25.

# SHAMROCK

28,000 S. 1-2 weeks 65-75° ANNUAL (Trifolium repens minus)

True Irish Shamrock. For 2-inch St. Patrick's Day plants sow in late December or early January using 3 or 4 seedlings per pot. Grow cool (50°) after germination. Our seed is the true Trifolium (Clover). The best results will be obtained in soil that is about 50% clay. Tr. pkt., 20c; ¼ oz., 35c; 1 oz., \$1.20.



#### **SCABIOSA** GIANT MIXTURE

A special mixture of large flowered varieties—fine for cutting.

# **SMILAX**

ANNUAL (Asparagus asparagoides)

4000 S. 3-4 weeks 65-75°

Popular climber for greens.

Tr. pkt., 40c; ¼ oz., 80c; 1 oz., \$2.50.

Snow-on-the-Mountain. See Euphorbia, page 19.

Solanum. See Cherries, Christmas, page 13; Peppers, Christmas, page 31; and Love Apple, page 27.

# **SNAPDRAGONS**

See pages 48-52.

# STATICE

ANNUAL (Limonium species)

350 S. 2-3 weeks 65-75°

SINUATA. 21/2 ft. This attractive annual is largely grown outdoors, especially in southern localities, but a mid-winter sowing makes a nice late spring greenhouse crop. May be used in the fresh state or dried.

• Heavenly Blue. Bright, clear sky-blue.

Market Rose. A warm, deep rose shade.

- Market Grower's Blue. Fine even deep blue. Excellent stock.
  - Lavender Queen. A very pleasing shade of pastel lavender.
- Snow Witch. Beautiful, clear white.
- Bonduelli Superba. Similar to the Sinuatas with yellow flowers.

Prices above 6, each: tr. pkt., 25c; 1 oz., 75c; 4 ozs., \$2.50; 1 lb., \$7.50.

• Superb Mixture. Contains a complete range of colors, from white through chamois, pink, rose and light blue to deep blue. Heads are large and compact. Tr. pkt., 25c; Î oz., 75c; 4 ozs., \$2.50; 1 lb., \$7.50.

Suworowi (Russian or Rat-Tail Statice). 12,000 S. Useful for greenhouse forcing. Long, lavender spikes. Tr. pkt., 30c; ¼ oz., \$1.00; 1 oz., \$3.00.

PERENNIAL (Limonium species) S. See below 2-3 weeks 65-75° Perennial Statice are very hardy, make good cut-flower material and can be dried and dved.

Caspia. 170,000 S. 8 inches to 11/2 ft. Seedlings flower second season. Lilac. Tr. pkt., 30c; ¼ oz., 80c; 1 oz., \$2.75.

- Dumosa. 19,000 S. 18 in. Dense clumps of silvery gray flowers. Tr. pkt., 40c; ¼ oz., \$1.00; 1 oz., \$3.00.
- Latifolia (Sea Lavender). 40,000 S. 2½ ft. Standard blue perennial Statice. Tr. pkt., 30c; ¼ oz., 65c; 1 oz., \$2.00.

Perezi. 14,000 S. Flowers in large lavender heads first year from seed. Tr. pkt., 40c; ¼ oz., \$1.25; 1 oz., \$3.75.

WHEN PLANNING YOUR BEDDING PLANT PROGRAM, BE SURE TO INCLUDE SOME OF THE MOST POPULAR VEGETABLES. SEE PAGES 63-67.

# Forcing Snapdragons

# COMPLETE LIST OF VARIETIES — OUR RECOMMENDATIONS ARE DOTTED SEE PAGE 51 FOR SNAP CULTURE

)(F) HYBRID

All Snapdragons listed on these pages are genuine XEHYBRID varieties except those marked "inbred" which are self-pollinated kinds.





TREASURE CHEST (New)



ANNUAL (Antirrhinum majus)

125,000 S. 1-2 weeks 65-75°

ABOUT BLOOMING DATES: Because of the remarkable strides made the last two years in year round Snap programming, and because of the recent development of varieties especially bred for specific seasons, we believe the old concept of "early "midseason", and "late" in reference to varieties has lost its meaning. We feel that the year divides itself into no less than seven rather well defined Snapdragon blooming periods in the northern part of our country. Hence, we have classified the Snap varieties listed here by letters to indicate the season or seasons for which each variety is best adapted. The letters incorporated in the variety descriptions on these pages refer to specific blooming seasons as follows:

A. December-January

B. February-Early April

C. Mid-April-May

D. Late May-June

July-EarlySeptember

F. Mid-September-October (Same varieties as "D")

G. November

Remember, though, that conditions vary in different localities and that keeping your own records will prove an invaluable guide in planning future crops.

1/2 Pkts. Available Only Where Listed

#### **BALL HYBRID SNAPS**

The following Ball Hybrids have come to be accepted as standards with growers everywhere—with improvements being added annually. See listings on these pages for a complete description of these varieties.

YELLOW Golden Spike Doubloon

BRONZE and RED

Indian Chief

Navajo

Cherokee

PINK Flower Girl Hercules Holiday Pink Ice

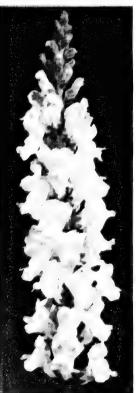
WHITE Snowman

Pike's Peak June Bride

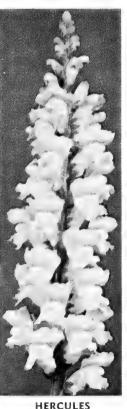
ROSE Treasure Chest (New) Bridesmaid

Showgirl Rosanna Jackpot **LAVENDER** 

Lavender Lady Hyb. Form. Mix.



SNOWMAN

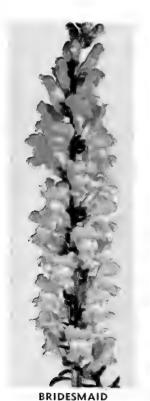


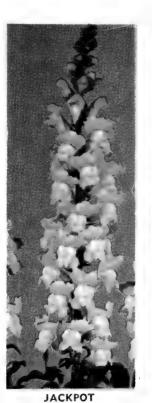
WHITE Tr. pkt. • Snowman (Ball). B. Excellent pure white. This has won acclaim as the nation's most widely grown pure white for winter and spring. 1/2 tr. pkt., Pike's Peak (Ball). C. Strong growing white with slight ivory cast. ½ tr. pkt., • Albion (Yoder Bros.). B., C. and G. A pure white which in our trials produces a better spike than White Knight although it is two weeks later .... 3.50 • Citation (Yoder Bros.). A. and B. Ivory. Very fine long spikes and clean, hard stems . . . 3.50 Crystal White Ball Strain (Inbred). E. Our own growing. Quite similar to the Crystal White Yoder Strain (Inbred), E. Taller and more uniform than the original Rockwood strain 3.50 Jet Pilot (Yoder Bros.). B. Pure white ..... 3.50 Margaret (Inbred), B. and C. Ivory, Very productive ...... 2.00 Maryland White Improved (Winkler). B. and C. Pure white, ½ tr. pkt., 3.50 • Potomac White (Winkler), D. and F. Summer flowering white Hybrid. • Rockwood's Crystal White (Inbred). E. An excellent pure white. For summer only. ½ tr. pkt., \$1.75 3.00 Snowdrift. C. Double flowering white. New Improved strain, bred for high light intensity areas or spring growing only. ½ tr. pkt., \$1.75...... Spartan White (Mich. State Univ.). B. and C. Clean growing, pure white. ½ tr. pkt., \$1.75 Twenty Grand (Yoder Bros.). B., C. and G. Excellent ivory ...... 3.50 • White Knight (Yoder Bros.). A pure white ...... 3.50 • White Skies (Yoder Bros.). D. and F. A good white Snap for summer only. Comparable to June Bride, but between that variety and Rockwood's Crystal White in flowering season ...... 3.50

# Forcing Snapdragons

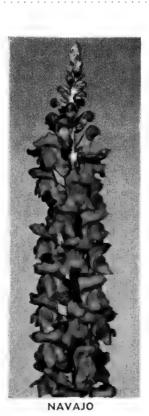


LIGHT PINK Tr. pkt	
11, pkt,	Tr. pkt.
• Hercules (Ball). B., C. and G. Light pink for spring. Long	• Rowenna (Yoder Bros.). A. Similar to Wintergreen, but earlier.\$3.50
spikes with clean, hard stems are big features here. ½ tr. pkt., \$2.00	• Summer Jewel (Yoder Bros.), D. and F. Same color as Rockwood's Summer Pink, but a few days earlier. We preferred Gay-
• Christina (J. S. Yoder). B. Popular light pink. ½ tr. pkt.,	time in our last summer's greenhouse trials
\$1.75 3.00	• Wintergreen (Yoder Bros.), A. Medium pink, One of the best
Mary Ellen (J. S. Yoder). B. Light pink. ½ tr. pkt., \$1.50 2.50	commercial Snaps
Maryland Pink Imp. (Winkler), B. Creamy light pink, ½ tr. pkt.,	
\$2.00 3.50	ROSE
Nashua (Yoder Bros.). B. Light pink; earlier than Rosebud 3.50	Bridesmaid (Ball). B. A clear medium rose with exceptionally
• Native Dancer (Yoder Bros.). B. and G. This light pink is a	long spikes of well placed, large florets, ½ tr. pkt., \$2.00 3.50
shade darker than Rosebud. Stems are hard and clean with well formed flower spikes. A good Snap	• Jackpot (Ball). B. Medium deep rose. Firm stems of medium
Rebecca (New—J. S. Yoder). B. A slightly lighter pink than	length carrying long spikes with excellently spaced florets. A heavy producer, ½ tr. pkt., \$2.00
Christina and a bit earlier. ½ tr. pkt., \$2.00 3.50	heavy producer. ½ tr. pkt., \$2.00
• Rosebud (Yoder Bros.), C. Pleasing light pink for spring, Clean	in its color class. Shatter-proof spikes, ½ tr. pkt., \$2.00 3.50
growth	• Rosanna (Ball). B. A bright, deep rose with long, tapering
Top Flight (Yoder Bros.), B. Light pink, Similar to Christina	spikes. ½ tr. pkt., \$2.00
but a few days earlier	
Whirlaway (Yoder Bros.), A. Pink with large yellow lip 3.50	• Treasure Chest (New Ball). B. and C. Long, tapering spikes of medium rose are carried on hard, clean stems. This
	really outstanding new variety is so free of grassy side growth
MEDIUM PINK	that plants may be spaced 20% closer together for single
• Pink Ice (Ball). A, and B. Bright pink with lighter lips. An ex-	stem culture. Not hard to figure what 20% better yield per
cellent hard stemmed variety. ½ tr. pkt., \$2.00 3.50	bench can mean in dollar returns. Treasure Chest is an excel- lent example of the made to measure results of modern
• Flower Girl (Ball). B. Long medium pink spikes carried on	scientific plant breeding. ½ tr. pkt., \$2.00 3.50
clean, firm stems. ½ tr. pkt., \$2.00	2 - T
Holiday (Ball). B. Medium pink; long spikes, ½ tr. pkt., \$2.00	Better Times (Inbred). B. Bright cerise-rose. ½ tr. pkt., \$1.25 2.00
	Christmas Cheer (Windmiller). A. Extra early, productive, bright rose. ½ tr. pkt., \$1.75 3.00
<b>Anne Marie</b> (J. S. Yoder). C. Late flowering, clear, medium pink. ½ tr. pkt., <b>\$2.00</b>	<b>Libby</b> (J. S. Yoder). B. Dark rose. ½ tr. pkt., \$2.00 3.50
Chevy Chase Pink (Winkler). B. Similar to Maryland Pink,	Maryland Flamingo (New—Winkler). The originator describes
but a shade darker, Shatter-proof. ½ tr. pkt., \$2.00 3.50	this as "a new color—bright salmon-rose similar to Carnations,
Crusader (Yoder Bros.), B. Medium, silvery pink 3.50	Charlene and Sidney Littlefield." Shatter-resistant. ½ tr. pkt.,
• Gaytime (Yoder Bros.). D. and F. Medium pink, yellow lip. A	\$2.00 3.50
week earlier than Rockwood's Summer Pink with better vigor,	• New Times (Pan-American). A. Bright, deep rose. Medium long
stem and color	spikes with firm stems. ½ tr. pkt., \$1.75
Pompey (Yoder Bros.). B. Medium pink. Long spikes 3.50	Prestige (Yoder Bros.), B. Long spikes of medium rose with yellow lip, Growth somewhat grassy 3.50
● Potomac Pink (Winkler). D. and F. Summer flowering pink Hybrid. ½ tr. pkt., \$2.00	•
• Rockwood's Summer Pink No. 1 (Inbred). E. Medium rose.	Spartan Rose (Mich. State Univ.). B. Medium deep rose with long, heavy spikes. For late winter and spring only. ½ tr. pkt.,
For long days only. ½ tr. pkt., \$1.75 3.00	\$1.75 3.00











LAVENDER LADY

The dot ( ) indicates varieties most dependably satisfactory in our experience and observation.

Grog Ball

# Forcing Snapdragons

# COMPLETE LIST OF VARIETIES — OUR RECOMMENDATIONS ARE DOTTED SEE PAGE 51 FOR SNAP CULTURE

(F) HYBRID

All Snapdragons listed on these pages are genuine \*\*IFHYBRID\*\* varieties except those marked "inbred" which are self-pollinated kinds.

(F) HYBRID

YELLOW	Tr. pkt.		r. pkt
• Doubloon (Ball). A. and B. Here's the rich, deep "treasu color you've wanted for years in a true mid-winter bloomin Doubloon is many shades deeper and brighter than War or Patricia. Pictured on page 48. ½ tr. pkt., \$2.00	ng Šnap. Admiral \$3.50	<ul> <li>Cherokee (Ball). A. A true "Christmas" scarlet-red—not the crimson or wine-red color commonly grown. Long, well formed spikes with sturdy stems. ½ tr. pkt., \$2.00</li> <li>Navajo (Ball). B., C., D., F. and G. We consider this the fines all-purpose red Snap available. Should be sown a week earlier</li> </ul>	l \$3.50 st
<ul> <li>Golden Spike (Ball). C. A rich, deep golden yellow with tapering spikes; for spring. ½ tr. pkt., \$2.00</li> <li>Broker's Tip (Yoder Bros.). B. Medium yellow for late.</li> </ul>	3.50 winter	than other varieties for winter. ½ tr. pkt., \$2.00	3.50 3.50
<ul> <li>and spring. Firm stems</li> <li>Dark Star (Yoder Bros.). D. and F. A deep yellow wis spikes and hard stems. A week earlier than Rockwood's</li> </ul>	th good	lip. Similar in color to Commando but a cleaner grower with better flower placement	3.50
Yellow and a better Snap. For long days only  Goldrush (Winkler). B. Large flowered medium yellow	3.50	pkt., \$2.00	3.50
pkt., \$2.00	<b>3.5</b> 0	½ tr. pkt., \$2.00	3.50
• Potomac Yellow (Winkler). D. and F. Medium yellow. I flowering hybrid. ½ tr. pkt., \$2.00	Summer	pkt., \$1.75	
• Rockwood's Summer Yellow (Inbred). E. Fairly deep	yellow.	LAVENDER	
For summer only. ½ tr. pkt., \$1.75	Similar	• Lavender Lady (Ball). B. and C. A deep rosy lavender shade with excellent spikes and stems. For late winter and spring.	•
War Admiral (Yoder Bros.). A. Excellent medium yel midwinter		½ tr. pkt., \$2.00  • Esquire (Ball). B. Bright wine or fuchsia-purple. ½ tr. pkt., \$2.00	3.50 3.50
Swaps (Yoder Bros.). A. Large yellow florets; compared and hard stem. Earlier than War Admiral		• Bold Venture (Yoder Bros.). A. Fuchsia-purple, Long stems	s 3.50
BRONZE		Maryland Lavender (Winkler). B. ½ tr. pkt., \$2.00 Rockwood's Lavender Rose (Inbred). E. For summer only. ½ tr. pkt., \$1.75	
Indian Chief (Ball). C. Scarlet-bronze for spring. ½ \$2.00	3.50	MIXTURES	3,10
• Barbara (J. S. Yoder). B., C. and G. Large flowered brompink throat. ½ tr. pkt., \$2.00		Hybrid Formula Mixture. Well balanced blend of winter and	ì
• Cavalcade (Yoder Bros.). B. A lively golden bronze		spring Hybrid Snaps. ½ tr. pkt., \$1.75	3.00
• Gallant Fox (Yoder Bros.). B. Medium rosy bronze, V	ery fine 3.50	<b>Sweethearts on Parade</b> (Inbred). A formula mixture of double flowering colors in shades of crimson, yellow, bronze and white.	
Jubilee (Winkler). B. Light golden bronze. Habit sin Goldrush. ½ tr. pkt., \$2.00	3.50	Satisfactory for spring greenhouse flowering during April-May or for outdoor summer culture. Will not produce satisfactory win-	-
Maryland Orange (Winkler). B. Large flowered rosy Hard stems. ½ tr. pkt., \$2.00		ter blooms under glass. $\frac{1}{2}$ tr. pkt., \$1.25; tr. pkt., \$2.00; $\frac{1}{164}$ oz., \$4.00.	i

# YEAR ROUND SNAPS

Variety selection appears to be the key to year-round Snap schedules. We recommend no less than seven changes of varieties in a 12 month period. Each group has a different response to temperature and light, from the summer hybrids that tolerate extreme heat and strong light, to midwinter types that will produce quality stems in the shortest period of time during dull weather. The result is a surprising uniformity of quality.

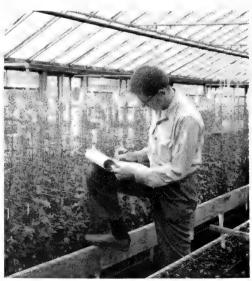
Winter Snaps on raised benches do take as long as 5½ months to flower, compared to a little under 3 months with summer hybrids. But if this appears slow try summer Snaps in the winter—completely vegetative until June no matter how early they are sown. So improved winter varieties do keep production time down to a minimum.

In fact, when seedlings are Jiffy-Potted for six weeks, you can keep a crop coming every four months from the same bench in the dead of winter. This is the basis for steady production of three crops a year.

What is the advantage of having steady year round Snaps? Mainly, no fluctuations in production. Extra summer production is hard to move, and any drop in winter Snaps hurts when the market is at its best. The steady producer can line up standing orders for much of his crop, like the year round Mum growers do, and avoid the "hassle" of seasonal selling with its gluts, scarcities and wide price fluctuations.

But what about the good January-February market, you say? Can't I grow extra Snaps when the price is so solid? One attractive way to lick this problem is to use extra benches for one winter crop, over and above the year round program. These can be benched in late summer, cleared in time to finish Lilies, Hydrangeas, Azaleas, late bulbs, and other pot crops, and then filled with bedding plants in the spring.

We said that varieties were the heart of the year round Snaps, and here is what we meant. This is the latest dope we have on the best for each season in the north (Montana, Nebraska, Iowa, Central Illinois, Central Indiana, Ohio, Pennsylvania, New Jersey and north).



Year round Snaps! A surprising number of both retail and wholesale growers are now flowering Snaps year round—just like Mums. The typical comment: "We need Snaps every month, why not plan to have a new bench come in twice a month?" Result: Our new Snap Planning Service—to assist growers in scheduling—and in selection of correct varieties for each season. Here's Robert Wright, of our Grower Service Department, with our year round trials—3 crops a year per bench, by the way.

# YEAR ROUND SNAPS



# (Continued from previous page)

# RECOMMENDED VARIETIES FOR THE NORTH

Variety names in italics indicate our preference.

#### **DECEMBER-JANUARY** Flowering

WHITE White Knight, Citation YELLOW Doubloon, War Admiral PINK Wintergreen, Pink Ice

ROSE New Times CherokeeRED

LAVENDER Esquire, Bold Venture

# FEBRUARY-EARLY APRIL Flowering

WHITE Snowman, Citation, Twenty Grand, Albion YELLOW Doubloon, Seabiscuit, Patricia, Broker's Tip

**BRONZE** Barbara, Cavalcade, Gallant Fox

PINK Native Dancer, Pink Ice, Christina (April only for

Hercules)

ROSE Flower Girl, Jackpot, Rosanna Cherokee (February only), Navajo RED

LAVENDER Lavender Lady

# MID-APRIL-MAY Flowering

WHITE Albion, Twenty Grand, Apollo Golden Spike, Seabiscuit Indian Chief, Barbara YELLOW **BRONZE** PINK Hercules

ROSE

Showgirl, Treasure Chest RED Navajo

LAVENDER

Lavender Lady

# LATE MAY AND JUNE Flowering

June Bride, Potomac White, White Skies WHITE

YELLOW Potomac Yellow, Dark Star

Potomac Pink, Gaytime, Summer Jewel PINK

RED Navajo

#### JULY-EARLY SEPTEMBER Flowering

\*Rockwood Crystal White, White Skies WHITE \*Rockwood Summer Yellow, Dark Star YELLOW

\*Rockwood Summer Pink, Gaytime, Summer Jewel \*Rockwood varieties will be about a week later than the schedule (below at right) shows.

#### MID-SEPTEMBER-OCTOBER Flowering

Same as late May-June.

## **NOVEMBER** Flowering

WHITE Albion, Twenty Grand, Apollo

YELLOW Seabiscuit

PINK Native Dancer, Hercules ROSE Showgirl, Treasure Chest

**BRONZE** Barbara

Navajo (late) RED

For more southern regions, the varieties remain the same but seasons in which they are used change. To cite an example, for the Atlanta vicinity we would recommend the mid-April and May group for the entire winter, December through April. Some southern growers also use February-early April varieties in this period. During May and half of June, we'd suggest June Bride and the Potomac varieties. The summer group would be carried from June 15 through early October, and then back to the June-Bride-Potomac group from mid-October through November.

#### OUR SNAP PLANNING SERVICE

If you are interested in year 'round Snaps write us, giving the size and number of beds you wish to schedule for year 'round production. We will do the rest-plan the correct varieties for each season, sowing dates, spacing, culture, and amounts of seed required—and send you a complete schedule. Then upon receipt of your O.K., seeds for your first rotation will be sent, and as each new rotation comes up new seed will arrive fresh from our controlled-environment storage. Changes in the schedule may be made at any time, and we will notify you when your current program is nearing completion.

We will also be happy to offer scheduling and cultural advice for special crops not on a year round program.

This Snap Planning Service is one function of our GROWER SERVICE DEPARTMENT, created to serve you better. The trained personnel in our Grower Service Department will be glad to offer their assistance with any of your cultural problems. Write this department if you have any questions, and also if you have any complaints that might involve cultural practices.

# BRIEFS ON SNAP CULTURE

Good Snaps can be grown in a wide variety of soils. As a general rule any soil that will grow good Mums will grow good Snaps. The really important point is that it contain plenty of organic matter. While this may take the form of manure, be sure it is well rotted. As a matter of fact, peat is generally preferred because it is more uniform.

The amount of organic matter which a soil needs depends upon its basic structure. Heavy, clay-like soils will need more than loose, sandy sorts. If an average good garden or field soil is to be used, one part of organic matter should be incorporated with each two or three parts of soil. To this should be added three pounds of 20% superphosphate per 100 square feet of bench area before steaming. Other than this we prefer to depend upon regular feedings as soil tests indicate their need rather than to load the soil with too much fertilizer to start with.

## Sterilizina

We like to steam sterilize our soil before benching, too. It cleans up disease organisms, kills soil-borne weed seeds and insects and tends to improve the soil's physical condition. Low (8 to 10 lbs.) steam pressure does the job for us. Holding soil temperatures at 180° for half an hour after this temperature has been reached is all it takes. After sterilizing. a heavy leaching with clear water will tend to prevent an excessive buildup of nitrates which might injure young roots.

#### Seed Sowing

Vermiculite, peat, or soil and peat mixture all make satisfactory materials for germinating Snap seed. We like to have the flats well watered before sowing, which may be done either broadcast or in shallow rows. We prefer the latter since it permits better aeration after the seedlings get started. No additional soil covering is needed for this fine seed—a light misting with a fine spray will settle it into the soil. If weather is hot or windy, flats should be protected with cheesecloth or paper shade until well up, then they will enjoy full light and a cooler, airy location. Seeds should germinate in 3 or 4 days in summer, 7 or 8 days in winter in a night temperature of 60-65°.

# **Planting**

If bench space is available, we like to bench seedlings direct—less labor and better growth. It works nicely even in hot weather, if the soil is moist before benching, seedlings are planted shallow, and misted within minutes of benching and regularly until new roots show.

In regard to the matter of spacing, we believe 3 x 6 inches is the most economical and profitable for a winter single stem crop with 3 x 5 inches being enough for late spring and summer crops. We space our pinched crops 7 x 8 inches, finding this satisfactory for most varieties. If you are obliged to transplant, band or pot seedlings, do not pinch them until plants have been benched and have taken hold. To pinch before benching well usually result in only two top breaks rather than the four or so that each plant should produce. We like to pinch when plants are about 8 inches high, leaving 3 good pairs of leaves.

#### Temperature

Normal during firing season: nights  $50^\circ,$  cloudy days  $57^\circ$  sunny days  $65^\circ.$ 

#### Sowing Dates

The dates given here are intended as suggestions only-based on our experience here in the Midwest.

	SI		
Sow	Flower	Sow	Flower
Aug. 20	Jan. 15	April 15	July 15
Sept. 5	Feb. 15	May 20	Aug. 15
Sept. 25	Mar. 15	June 20	Sept. 15
October, 20	April 15	July 15	Oct. 15
Dec. 20	May 15	July 25	Nov. 15
Feb. 15	June 15	Aug. 10	Dec. 15

## PINCHED CROPS

Wait till breaks are at least an inch long in leaf axils-plant usually about 8 inches high—then pinch to leave 3 pairs of leaves.

Sow	Flower	Sow	Flower
July 20	Mid-Dec.	Sept. 5	Early March
Aug. 1	Mid-Jan.	Sept 25	Early April
Aug. 20	Mid-Feb.	Nov. 20	Mid-May

Gro. G. Ball

# Outdoor Snaps

# FOR SPRING PLANT SALES

ANNUAL (Antirrhinum majus)

180,000 S. 1-2 weeks 65-75°

If you want bedding Snaps that are in full bloom a week or ten days earlier, that branch and bloom much more freely and are more uniform in color and habit—try "Hit Parade" Hybrids. They're extra nice for cutting too! The dwarf (Nanum Grandiflorum) type is bushy, with no tendency to sprawl, if not supported. The taller varieties should be supported, if straight stems are wanted.

# HYBRID HIT PARADE SNAPS

For all-purpose bedding Snaps, you can't beat these genuine F<sub>1</sub> Hybrids, especially adapted to bedding conditions. You'll have earlier flowers and more of them on bushy plants. *Ball Orig. Seed*.

- Memory. Medium pink.
- Temptation. Crimson-red.
- Stardust. Bright yellow.
- Sophisticated Lady. Lavender.
- Mexicali Rose. Deep rose.
- Harvest Moon. Orange-bronze.
- Bob White. Creamy white.



#### HIT PARADE MIXTURE

Formula mixture of above colors. Early blooming and plenty of flowers all season.

Prices above 8, each: tr. pkt., \$1.50;  $\frac{1}{32}$  oz., \$4.75;  $\frac{1}{16}$  oz., \$8.50;  $\frac{1}{8}$  oz., \$15.50;  $\frac{1}{4}$  oz., \$28.00.

#### BALL 10 BEST INBRED VARIETIES

- Alaska. Long-stemmed white for cutting.
- Canary Bird. Long-stemmed yellow. Good cut flower.
- Cattleva. Rosy layender.
- Cherry Red. A bright, rosy cerise-red.
- Copper Queen. Shades of bronzy copper; long-stemmed.
- Crimson (Padre). Deep crimson, valuable for cutting.
- Orange Shades. Bright and showy; not a coppery bronze.
- Pinkie. Lighter than Rosalie; very fine.
- Rosalie. A rich deep rose; fine for cutting.
- Yellow Jacket. Attractive deep rich yellow.

• Improved California Mixture. Mixture of the best tall varieties.

Prices above 11, each: tr. pkt., 40c; ½ oz., 70c; ¼ oz., \$1.25; 1 oz., \$3.75.

**COLLECTION:** We offer one tr. pkt, each of the 10 Best named varieties above for \$3.60.

#### OTHER VARIETIES

TALL (Maximum). The long-stemmed type for cutting. Improved California Mixture. See 10 Best.

HALF DWARF (Majestic).

Mixture (Rust-Resistant). Extra large flowered.

Tr. pkt., 40c; ½ oz., 70c; ¼ oz., \$1.25; 1 oz., \$3.75.

DWARF (Nanum Grandiflorum). Compact plants for bedding.

Black Prince. Deep velvety crimson.

Gloria. Uniformly dwarf, deep rose-pink. Imported strain.

Golden Queen. Rich golden yellow.

Purity. Large flowered creamy white.

St. George. Flashing orange-cerise.

• Mixture (Rust-Resistant), All colors, Ideal for bedding,

**Prices** above 6. each: tr. pkt., 50c;  $\frac{1}{8}$  oz., 85c;  $\frac{1}{4}$  oz., \$1.50; 1 oz., \$5.50.

TOM THUMB. (4 to 6 in.)

 Magic Carpet. The uniformly dwarf and compact habit of this superior mixture makes it an excellent bedding and border plant. Try some this year for a pleasant surprise.

Tr. pkt., 50c; \(\frac{1}{8}\) oz., 85c; \(\hat{1}\)4 oz., \$1.50; \(\hat{1}\) oz., \$5.50.



# **BALL RED BOOK**

Cultural information on over 130 greenhouse crops, together with articles on greenhouse management and merchandising.

BALL RED BOOK, Ninth Edition. Price, \$2.00



# HIT PARADE MIXTURE

Extra early, free flowering, bedding Snaps. "Hit Parade" is on our Sweet Sixteen list this year. Be sure to have plants available.

## TETRAPLOID SNAPS

Tetraploid Snaps or "Tetras" have larger florets with thicker petals and foliage than the ordinary kind. Under good growing conditions really outstanding spikes can be developed.

Crimson. Bright crimson-red.

Pink. Salmon-pink. Medium tall; huge florets.

Rose. Bright rose.

White. Light creamy white, changing to pure white with age.

Yellow. Tall, base-branching, clear yellow. Long spikes and large flowers.

Prices above 5, each: tr. pkt., 60c;  $\frac{1}{8}$  oz., \$1.50;  $\frac{1}{4}$  oz., \$2.75; 1 oz., \$8.25.

• Giant Ruffled "Tetra" Mixture of all colors. Tr. pkt., 50c; ½ oz., \$1.25; ¼ oz., \$2.25; 1 oz., \$6.75.

#### COLOSSAL SNAPS

This inbred strain is extra vigorous, producing strong, long-stemmed spikes of large, well formed florets. One of the best outdoor strains for cutting.

White Pink Orchid
Orange Yellow • Mixture

Velvet Giant. The rich, velvety crimson-red flowers of this variety are much larger than most outdoor Snaps, and the spikes are heavier.

Prices above 7, each: tr. pkt., 40c;  $\frac{1}{2}$  oz., 90c;  $\frac{1}{4}$  oz., \$1.75; 1 oz., \$5.00.

# F2 "PANORAMA" SNAPS ==

The following varieties are produced from  $F_1$  Hybrid parents and represent the  $F_2$  or second generation. Because of the control exercised over the parents involved in the original cross, the  $F_2$  generation breeds true for color and possesses most of the desirable vigor of a true  $F_1$  Hybrid, but at a lower seed cost.

Pink Ivory Yellow Red Lavender

F<sub>2</sub> Formula Mixture of above colors.

Prices above 6, each: tr. pkt., \$1.00; ½ oz., \$3.00; 1 oz., \$9.00.

# Ball COLUMN Stocks



#### (NON-BRANCHING

ANNUAL (Mathiola incana)

16.000 S. 2 weeks 65-75°

The most important points in growing good greenhouse Stocks are: (1) plant only in clean soil to avoid root rot; (2) grow them cool—not over 50° nights. A spacing of 3x6 inches is ample for good quality and they may be safely sown in our latitude from July 15 to February 15. Later sowings may come blind. Constant breeding and selection maintain a uniformly high percentage of doubles in our strains, which may be further increased if the largest seedlings are selected in planting or thinning.

Our "6 BEST" greenhouse varieties are dotted ( • )

## WHITE

No. 25 Minaret. This fine white combines the close-spaced spike of No. 16 with a larger, longer stem which makes it quite valuable to cut-flower growers. Ball Orig. Seed.

Pacific White. A pure white with large, well spaced florets. A bit later than No. 16 but earlier than Avalanche. Recommended for both greenhouse and outdoor use.

• No. 16 Ball White-Medium tall. This early pure white is the most popular variety on our entire list, Ball Orig, Seed.

White Giant. Good long-stemmed white for outdoor growing. We prefer our No. 16 Ball White for greenhouse use.

Gardenia Imp. Pure white. Branches somewhat. A fine outdoor strain. Avalanche. Finest white for outdoor growing; also excellent for greenhouse use although later than No. 16.

## LAVENDER, BLUE and PURPLE

• No. 1 Lilac-Lavender Improved. Early blooming, silvery lilac. Good stems with long flower spikes. Ball Orig. Seed.

No. 3 Ball Blue Improved. Deep bluish lavender; long spikes, Ball Orig. Seed.

• No. 21 Purple Heart. Long-stemmed and large-flowered, bright violetpurple. Ball Orig. Seed.

# PINK, ROSE and RED

Pacific Pink. A bright, luminous salmon-rose-pink without the bluish or orchid cast of other pinks and roses. Somewhat later than most Column Stocks, and is at its best in spring.

• No. 22 Ball Supreme. A long-stemmed, vigorous growing variety with fine, heavy spikes of rich silvery rose. Ball Orig. Seed.

No. 11 Ball Pink, A medium pink; somewhat lighter than No. 22. Ball Orig. Seed.

No. 14 Ball Rose. An early flowering, fairly deep rose-pink. Darker in color than Supreme No. 22, Ball Orig. Seed.

No. 9 Chamois-pink. A warm rosy buff color. Good stems and flower spikes. Ball Orig. Seed.

No. 7 Malmaison Pink, Improved. Long stems and spikes of soft shellpink. A popular color. Ball Orig. Seed.

No. 6 American Beauty. Rich deep carmine-rose, Ball Orig. Seed.

• No. 8 Ruby Improved. A brilliant scarlet-crimson without the purple cast of other reds. Ball Orig Seed.

U.S.D.A. Double Pink. Improves the Hansen dark-leaved single, lightleaved double strain. Light-leaved doubles may be selected in seedling stage. In our greenhouse trials stem length was greater than Hansen's but not as long as regular Columns. Doubles retain some light leaf color in blooming stage.

#### MISCELLANEOUS VARIETIES

• No. 20 Ball Apricot. Long spikes of rich apricot tinged pink. Ball Orig. Seed.

No. 24 Deep Apricot Improved. Darker than No. 20. Ball Orig. Seed.

No. 17 Gold Standard. Creamy ivory-yellow. Ball Orig. Seed.

No. 26 Butterscotch. This fine, creamy yellow is a definite improvement over present strains in stem length, flower size and color, Ball Orig. Seed.

Yellow Wonder. Popular ivory-yellow for outdoor growing. Branches slightly.

No. 10 Mixture. Our own formula mixture. Ball Orig. Seed.

Prices all above Non-Branching Stocks, each: ½ tr. pkt., 75c; tr. pkt., \$1.25;  $\frac{1}{4}$  oz., \$2.75;  $\frac{1}{2}$  oz., \$5.25; 1 oz., \$10.00.

**COLLECTION:** 1 tr. pkt. each of the 6 Best (dotted) varieties, for \$6.75.

# BRANCHING STOCKS

# HANSEN'S ALL-DOUBLE SELECT STOCKS

Light leaved doubles and dark leaved singles—apparent in the seedling stage at 50°—provide a positive means of separating singles from doubles in this strain. Stems are about one-half as long as the regular Ball type Column Stocks.

BRANCHING

Dwarf Park Mixture. A dwarf branching type of the All-Double Select Stocks described above. For outdoor bedding in cooler temperatures. Tr. pkt., 75c;  $\frac{1}{16}$  oz., \$1.20;  $\frac{1}{4}$  oz., \$4.00; 1 oz., \$12.00.

# GIANTS OF CALIFORNIA (Improved Bismarcks)

Apple Blossom. Pale pink. Blood-Red. Ruby-red. Chamois. Chamois or buff. Elk's Pride. Rich purple.

• Santa Maria. Best branching white.

Golden Ball. Ivory-yellow. Lavender. Lilac-lavender.

Rose. Bright rose-pink. Formula Mixture of above colors.

Prices above 9, each: tr. pkt., 40c; 1/4 oz., \$1.25; 1 oz., \$4.00.

## TRYSOMIC HI-DOUBLE STOCKS

An unusual race of branching Stocks which makes use of scientific plant breeding principles to produce 80-85% double flowering plants.

Chamois. Buff-Pink Canary-Yellow Fiery Red Lilac-Lavender Navy-Blue White Trysomic Hi-Double Mix. Prices above 8, each: ½ tr. pkt., \$1.00; tr. pkt., \$1.75; ½ oz., \$2.90; ½ oz. \$5.00.

# TRYSOMIC 7-WEEK MIXTURE =

1 ft. Blooms outdoors during hottest weather. Complete color range. ½ tr. pkt. \$1.00; tr. pkt. \$1.75; ½ oz. \$2.90; ¼ oz. \$5.00; 1 oz. \$18.00.

## DWARF TEN WEEK

Makes very attractive pot plants.

Canary-Yellow Lavender Deep Rose Purple White Formula Mixture

Prices above 7, each: tr. pkt., 30c; 1/4 oz., \$1.00; 1 oz., \$3.00.

# STOKESIA (Stoke's Aster)

PERENNIAL (S. cyanea)

3300 S. 4-6 weeks 65-75°

Cyanea. 20 in. Large blue flowers. Tr. pkt., 40c; 1/4 oz., \$1.35; 1 oz., \$4.00.

# STRELITZIA (Bird of Paradise)

ANNUAL (S. reginae)

140 S. 3-4 weeks 65-75°

Regina, Exhibition strain, Giant flowers of dark blue and deep orange. 10 seeds \$1.25; 100 seeds, \$10.00.

**STREPTOCARPUS** (Cape Primrose) ANNUAL (S. hybridus) 750,000 S. 2-3 weeks 65-75°

# • WIESMOOR HYBRIDS =

Fringed, Orchid-like flowers 4 to 5 inches across in a bright array of colors, including shades of pink, red, blue, lilac and white. Sow from October to March for cut flowers or pot plants from April to December, Originator's tr. pkt., \$1.25; 5 tr. pkts., \$5.25.

Sunflower. See Helianthus, page 22



# Ball Sweet Peas

ANNUAL (Lathyrus odoratus) 350 S. 2 weeks 65-75°

# WINTER PEAS

#### STANDARD WINTER VARIETIES

These varieties are at their best during winter and early spring from a July to September sowing. While we prefer the Spring Flowering for late greenhouse planting, the Winter class does flower earlier and in some sections is preferred even for outdoor planting. The 12 best varieties are indicated by a ( • ).

#### PINK, ROSE and SALMON

- Ball Rose Queen. Clear rose-pink. Ball Orig. Seed.
- Ball Rose Supreme. Silvery rose. Ball Orig. Seed.
- Ball Salmon. Medium salmon. Ball Orig Seed.

Daphne. Soft salmon-pink on cream. Large flowered.

• Hiawatha. Strong growing, large flowered deep rose,

#### ORANGE and RED

- Ball Orange Supreme. Clear orange. Ball Orig. Seed.
- Fiesta. Brilliant scarlet-cerise; the finest winter red.
- Treasure Island. Large, wavy flowers of cerise-orange.

#### WHITE

• Cascade. Earliest large flowered white; white seeded. Hope. Fine black seeded white.

## LAVENDER, BLUE and PURPLE

- Ball Blue Supreme. Rich mid-blue. Ball Orig. Seed.
- Harmony. Early flowering lavender. Rhapsody. Extra large flowered, deep rosy lavender.
- Top Hat. Deep bright violet-blue.
- Triumph. Long-stemmed, rich lilac-mauve; very well liked. • Twilight. A bright clear lavender.

Prices all Standard Winter varieties, each: ½ oz., 35c; 1 oz., 55c; 4 ozs., \$1.65; 1 lb., \$6.00.

• 12 Best Mixture. Our own formula mixture of the 12 best (dotted) varieties. ½ oz., 35c; 1 oz., 55c; 4 ozs., \$1.65; 1 lb., \$6.00.



William Zvolanek, originator of the Fioribunda Sweet Peas, looking over his seed crop.

# ZVOLANEK'S FLORIBUNDAS

Originator's Seed

Developed from the sensational Multifloras, the Floribunda Class is a spring flowering Sweet Pea. It branches freely with long, strong stems, as many as 6 and 7 blooms, and has other fine characteristics of the Multiflora line. Our trials definitely indicate that the Floribundas are superior to other strains for spring greenhouse or outdoor use in our locality.

- Pure White
- Lavender Rose-Pink Mid-Blue
- Carmine-Rose Light Pink
- Scarlet Lilac Mixture

Prices above 9, each: ½ oz., 85c; 1 oz., \$1.50; 4 ozs., \$5.00; 1 lb., \$16.00.

# ZVOLANEK'S MULTIFLORAS

Originator's Seed

These fine varieties are the result of years of painstaking selection on the part of William Zvolanek, veteran California Sweet Pea breeder. They are unusually free flowering and long-stemmed with many stems carrying 5 and 6 flowers instead of the usual 3 and 4. Sow from mid-July through November for blooms November through May.

Blue Wonder. Clear medium blue flowers on very long, strong stems. Deep Rose. Deep, bright rose; fine for spring. Long stems, and vigorous growth.

GEO. J. BALL<sup>™</sup>

This deep coral-rose is one of the best Multiflora Sweet Peas.

Giant Lilac. Bright mauve, same color as Triumph. Large flowers on extra long, heavy stems. Strong growth.

• Lavender. Orchid-lavender, near Twilight in color. A strong grower with extra long stems.

Light Rose-Pink. Almost flesh-pink in color. Large flowers on long

Orange-Cerise. Extra large flowers on long stems. A bright and striking color.

Red. Christmas red.

- Rose. Extra large, medium rose flowers on extra long, heavy stems. Vigorous growth
- Salmon-Pink. Large, medium rose-pink flowers with salmon cast. Stems extra long, but not as heavy as the other varieties in this class. Whirlwind. Large, light rose flowers on long stems.
- White. Pure white. Long, strong stems.

Multiflora Mixture. A complete color assortment.

Prices above 13 varieties, each: ½ oz., \$1.10; 1 oz., \$2.00; 4 ozs., \$6.00; 1 lb., \$18.50.

# SPRING PEAS

#### **CUTHBERTSON STRAIN**

Originator's Seed

This class is midway in blooming date between the Winter and Summer types, and is the preferred kind for spring greenhouse flowering. Don't sow before October for this purpose. They are also widely planted for outdoor use, being a week or two earlier than the Summer class and more heat resistant.

- Billy. Bright cerise-rose on salmon; very showy.
- Carol. Attractive clear pink on white ground; salmon shading. **Evelyn.** Extra long-stemmed, soft salmon-pink.
- Lois. Light rose-pink, similar in color to Ball Rose Queen.
- Jimmy. Rich, deep cherry-red.
- Frank G. Fine soft rosy lavender. One of the best.
- Tommy. Clear mid-blue. A popular commercial color. Daisy. Large frilled white; black seeded.
- Mixture. Balanced according to demand for each color.

Prices above 9 Cuthbertson varieties, each: ½ oz., 35c; 1 oz., 55c; 4 ozs., \$1.65; 1 lb., \$5.00.

#### **DWARF SWEET PEAS**

Little Sweethearts Mixture. Plants are upright and form rounded bushes about 8 in. high covered with large flowers in all shades. Needs no support and is suitable for borders or bedding. Originator's Seed. ½ oz., \$1.00; 1 oz., \$3.00; 4 ozs., \$10.00.

# SUMMER PEAS

The standard class for outdoor use. Sow in bands or pots in late winter. Grow cold after germination and plant out in early spring as soon as soil can be worked.

- Ball Shrimp-Pink. A pleasing soft shrimp-pink.
- Pinkie. Finest large flowered rose-pink.
- Welcome. An intense sun-proof scarlet.
- Snow White. The best clear white; black-seeded.
- King Lavender. Exceptionally clear even lavender.
- Windsor Blue. A supremely fine mid-blue.
- Ball Best Mixture. Composed only of the best varieties. Prices all above Summer Peas, each: ½ oz., 25c; 1 oz., 40c; 4 ozs.,

\$1.25; 1 lb., \$4.00.

# THERMOPSIS

PERENNIAL (T. caroliniana)

6500 S. Frost germinator

Caroliniana. 3 to 5 ft. Long panicles of yellow, Pea-shaped flowers. Tr. pkt., 30c; 1/4 oz., 75c; 1 oz., \$2.35.

# THUNBERGIA

ANNUAL (T. species)

S. See below 2-3 weeks 65-75°

• Alata (Black-Eyed Susan). 1100 S. Excellent used as a climber or as a trailing plant for porch boxes and urns. Makes a dense growth producing an abundance of flowers in shades of yellow, buff and orange some with black centers or "eyes."

Tr. pkt., 35c; 1/4 oz., 60c; 1 oz., \$1.80.

Gibsoni. 500 S. Flowers of a solid, deep orange are twice the size of Alata. 100 seeds, \$1.75; 1000 seeds, \$15.00.

# TITHONIA

ANNUAL (T. rotundifolia)

3500 S. 2-3 weeks 65-75°

Torch. VALL-AMERICA SELECTION 3 ft. Single, bright orange-scarlet flowers with yellow discs are carried on erect, bushy plants. Makes a good cut flower. Stands heat well. Tr. pkt., 40c; 1/4 oz., \$1.50; 1 oz., \$4.50.

Tobacco Plant. See Nicotiana, page 30.

# TORENIA

ANNUAL (T. Fournieri).

375.000 S. 2 weeks 65-75°

An excellent plant for spring combination use or for bedding in semishade and shade. Sow several weeks ahead of other bedding plants.

• Fournieri Grandiflora. 12 in. Rich, deep blue with violet and yellow blotch on lin.

Fournieri Compacta, Blue. 8 in. A dwarf form of the above.

Fournieri Compacta, White. 8 in. Dwarf white.

Prices above 3, each: tr. pkt., 40c: \( \frac{1}{2} \) oz., \( \Sigma \) 1.25: \( \frac{1}{2} \) oz., \( \Sigma \)2.25.

# **TRITOMA** (Red Hot Poker)

PERENNIAL (Kniphofia Uvaria) 20,000 S. 3-4 weeks 65-75° 3 to 4 ft. Attractive long spikes from late summer until frost. Dig and store roots over winter in North.

• Pfitzer's Red. Large brilliant red.

Mirabilis. Yellow and orange shades.

Prices above 2, each: tr. pkt., 45c; \(\frac{1}{4}\) oz., 80c; 1 oz., \$2.40.

# **TROLLIUS** (Globe Flower)

**PERENNIAL** (T. species)

Allow seed to stand outdoors over winter for good germination or soak in hot water 30 minutes before sowing. Plants require moist soil.

Ledebouri, Orange. 2 ft. The standard variety. Tr. pkt., 60c;  $\frac{1}{16}$  oz., 1.25;  $\frac{1}{8}$  oz., 2.25.

Mixture. Beautiful variations in both form and shades.

Tr. pkt., 40c; 1/8 oz., \$1.50; 1/4 oz., \$2.70.

# **VERBENAS**

ANNUAL (V. hortensis)

10,000 S. 3-4 weeks 65-75°

One of the most colorful and showy plants for bedding, window boxes or combinations. Seed should be sown in a soil temperature of 65° to hasten germination which is sometimes slow. Once established, 50° nights suits them nicely, but be sure to pinch the taller varieties early to avoid straggly growth.

SPREADING. Growth is inclined to be procumbent or carpet-like, covering a fairly wide area.

SMALL SPREADING. Height 8 to 12 inches.

# ● IDEAL FLORIST STRAIN =

Low growing, but spreading in habit with large flowers in an extremely wide range of unusual colors—many attractive light eyes. Early and free flowering. Fine for flat sales.

Tr. pkt., 75c; ¼ oz., \$2.00; 1 oz., \$6.00.

Calypso (New). A novelty blend of striped and blotched types in many bright colors. These have been available heretofore from cuttings only, so this new strain should be welcomed by bedding plant growers. About 80% true to type. Tr. pkt., 75c; ¼ oz., \$2.00; 1 oz., \$6.00.



VERBENA. TORRID Deep red with white eye. Heat resistant.

# **VERBENAS**, Continued

Delight. Coral-pink, suffused salmon, A welcome addition to this increasingly popular class of dwarf Verbenas.

• Sparkle. Bright red with white eve.

Crystal, Large flowered, snow-white.

Sparkle Mixture. Plants of the same type as Sparkle and Crystal in a complete range of colors, mostly with white eyes.

Prices above 4, each: tr. pkt., 50c; ½ oz., \$1.50; 1 oz., \$4.50.

**Splendor** (New). Deep reddish purple with contrasting white eye. Tr. pkt., 75c; ½ oz., \$2.00; 1 oz., \$6.00.

SPREADING. Similar in habit to Small Spreading but reaches a height of 12 to 18 inches.

• Torrid. Deep red with contrasting white eye. Bred in the Middle West for heat resistance, and blooms freely under trying conditions. Ball Orig. Seed. Tr. pkt., 60c; ½ oz., \$1.65; ½ oz., \$3.00; 1 oz., \$9.00.

• Defiance. Scarlet-red with small white eye. The most vigorous and free flowering of all red Verbenas. Stands heat well.

Tr. pkt., 45c; ¼ oz., \$1.25; 1 oz., \$3.75.

• Beauty of Oxford. Extra large flowers, ranging from clear rose-pink to deep rose-red, all with slight white eve.

Dannebrog. Very attractive bright scarlet with large white eye.

Ellen Willmott. Extra large, salmon-pink. Lavender Glory. Very fine, large flowered lavender with white eye. About 75% true to type, balance white and purple.

• Marilyn. Fiery scarlet-cerise with creamy eye. Free flowering and com-

Mayflower. Shades of pink.

• Pure White. Very even strain. Large flowered and vigorous.

• Royale. Large flowered, rich, deep blue with eye. Spectrum Red. Very bright rich scarlet with no eye. Sutton's Blue. Deep royal blue without eye.

Mixture of all colors in the Grandiflora class.

Prices above 11, each: tr. pkt., 45c; 1/4 oz., \$1.25; 1 oz., \$3.75.

UPRIGHT. Free branching but distinctly bushy and upright in habit rather than spreading.

DWARF UPRIGHT. Height 4 to 8 inches.

Fireball. Bright, fiery scarlet, small flowers.

• Mixture of all colors in this compact class.

Prices above 2, each: tr. pkt., 50c; 1/4 oz., \$1.50; 1 oz., \$4.50.

UPRIGHT. Height 8 to 12 inches.

Firelight. A vivid, solid red.

• Giant Salmon Queen. Large flowered, bright coral-salmon. Starlight. Large flowers are a rich mid-blue with ivory-white eye. An excellent companion to Salmon Queen.

Blue Sentinel. Bright blue with very little violet shading.

Snowball. Fine free flowering pure white.

Prices above 5, each: tr. pkt., 55c; ½ oz., \$1.30; 1 oz., \$4.00.

• Rainbow Mixture. Semi-dwarf (8 to 10 in.), but upright growing plants in a wide assortment of colors. Its earliness and erect habit make this strain valuable for pots and combination boxes as well as for borders.

Royal Bouquet. 12 to 14 in. A mixture of all colors in this upright

type. Stems are long enough for limited cut-flower use.

Prices above 2, each: tr. pkt., 55c; 1/4 oz., \$1.65; 1 oz., \$5.00.

#### MISCELLANEOUS VARIETIES

Venosa Lilacina. 60,000 S. 8 to 10 in. Flowers continuously throughout our hot Midwestern summers. Deep lilac flowers. Tr. pkt., 35c;  $\frac{1}{4}$  oz., 1.00; 1 oz., 3.00.

SEE PAGE 58 FOR VINCA, VERONICA, VIOLA, WALLFLOWER, and YUCCA.





# DAHLIA-FLOWERED or GIANT MAMMOTH

#### WHITE and CREAM

Isabellina, Creamy vellow,

• Purity (Polar Bear). The best white in large-flowered Zinnias.

#### YELLOW and GOLDEN

• Canary Bird (Daffodil Imp.) A bright, clear canary-vellow.

• Golden Dawn (Golden Queen). Clear golden yellow. Extra large flowers.

Oriole (Orange King). Orange and gold.

#### LAVENDER and PURPLE

• Dream (Lavender Queen). An attractive lavender. Purple Prince (Violet Queen). Deep purple; large-flowered.

Pink Lady (New). An unusual bicolor variety with a shrimp-pink center and creamy buff outer petals. Tr. pkt., 85c; ½ oz., \$1.40; ¼ oz., \$2.50; 1 oz., \$7.50.

• Exquisite (Enchantress). Fine, light rose with deep cerise center.

• Illumination (Rose Queen). Deep rose, dark center. Darker than Exquisite.

Luminosa (Brightness). Bright pink suffused with salmon. Miss Willmott. Pleasing, soft pastel pink.

Salmon Queen (Eldorado). Luminous salmon-rose

#### RED and SCARLET

Cherry Queen. Brilliant cherry-rose.

• Crimson Monarch. Large-flowered, deep crimson-red. Meteor. Rich, deep amaranth-red. A striking color.

• Scarlet Flame (Will Rogers, Scarlet Queen), Bright scarlet.

## MIXTURES

#### GOLD MEDAL MIXTURE

We believe this is the finest complete mixture of large-flowered Zinnias

available. This is not a field-grown mixture. but it is carefully blended by formula from first class cut-flower colors and varieties in direct proportions to their commercial value.

- Indian Summer Mixture. Bright reds, yellows and oranges predominate to make this fine assortment of "Indian Summer" colors.
- Pastel Shades Mixture. A formula mixture of the lighter colors in the large-flowered class.

Giant Mammoth Mixture. A balanced formula mixture of all Giant Mammoth varieties.

Prices all Dahlia-Flowered Zinnias (except Pink Lady), each: tr. pkt., 30c; ¼ oz., 50c; 1 oz., \$1.50; 4 ozs., \$5.00; 1 lb., \$15.00.

COLLECTION. We offer a collection consisting of 1 tr. pkt. each of the above named varieties (except Pink Lady). 16 pkts. for

#### DAHLIA-FLOWERED ZINNIAS

Zinnias, Dahlia-Flowered varieties in order as they appear at left: Canary Bird, Purple Prince, Polar Bear, Illumination and Scarlet Flame. Our Gold Medal Mixture contains these and many other fine Zinnia colors.

# Florists' Zinnias

ANNUAL (Z. elegans)

2500-4000 S. 1-2 weeks 65-75

#### NOTES ON ZINNIA CULTURE

For Bedding: Always popular for their ease of culture and fine, vivid colors, Zinnias should account for a substantial part of your bedding sales. Because they are rapid growers, seed should not be sown until about a munth before your bedding plant selling season

For Cutting: Some protection by cloth or a greenhouse will produce long-stemmed, large-flowered Zinnias which make excellent cut lower material. Either the Dahlia-Flowered or the Lilliputs are O. K. for this. Sow direct in warm soil, flowering will begin in 7 or 8 weeks. An outdoor sowing as late as July 1 in our latitude will produce a fine crop of cut

Warning: Zinnias are native to warm climates and need 65° minimum to germinate and grow satisfactorily.

# GIANT CACTUS

2 to 3 ft. This class, with its large informally curled and ruffled petals is becoming more popular each vear

• Ice Cream. A completely different color in Zinnias, A rich, full bodied cream-not a light vellow. Blends with all other colors, Large, fully double flowers with ruffled petals. Tr. pkt., 50c; ½ oz., \$1.25; 1 oz., \$3.75; 4 ozs., \$12.50.

Apricot. Large double flowers of coral suffused apricot, with lacy, ruffled petals. Tr. pkt., 50c; ¼ oz., \$1.25; 1 oz., \$3.75;

4 ozs., \$12.50.

• Blaze. ALEAMERICA & SELECTION A brilliant combination of fiery mandarin-red and scarlet-orange. Unique and distinct Tr. pkt., 50c; ½ oz.. \$1.00; 1 oz., \$3.00;

Eskimo. Large, loosely ruffled flowers open creamy white, turning a clear white with age.

• Floradale Scarlet. Large, fully double scarlet flowers with lacy, ruffled petals.

Riverside Beauty. Large, double, soft coral-rose color with lacy, ruffled petals.

• Sunny Boy. Large buttercup-yellow flowers.

#### ● CACTUS FLOWERED MIXTURE

One of our finest Zinnias. Extra large, fully double flowers with large

ruffled petals. A nicely balanced mixture of colors, mostly pastels.

• Treasure Island. This new strain is an F: with hybrid vigor and large, fluffy, informal flowers up to 7 inches across in shades of red, orange and yellow. Plants grow about 3 feet tall. Prices last 6, each: tr. pkt., 40c; ¼ oz., 75c; 1 oz., \$2.50; 4 ozs., \$7.50.

# LILLIPUTS

18 in. Flowers about the size of average buttontype Pompons.

 Canary Gen Crimson Gem

• Lilac Gem

4 ozs., \$9.00.

Golden Gem • Pink Gem

Purple Gem Salmon Gem • Scarlet Gem

White Gem Rosebud.



# ● FORMULA MIXTURE=

Popular mixture of all colors in the Lilliput class. Pictured below.

# MISCELLANEOUS VARIETIES

Linearis. A heat-resistant, free-blooming subject for edging and rock garden work. Compac (6-8 in.), early flowering with single, bright orange flowers. Tr. pkt.. 50c; ½ oz., \$1.50; 1 oz., \$4.50.

MERRY-GO-ROUND (New) =

 Originator's description: "Cactus and semi-Cactus type flowers, 3 to 4 inches across are borne freely on 12- to 18-inch, dwarf, bushy plants. Each flower is sharply bicolored with the outer 1/3 of each petal being in distinct contrast to the petal base. All colors are represented with petals tipped

in white or gold. (Pictured below). Tr. pkt., 75c; 1/8 oz., \$1.25; 1/4 oz., \$2.00; 1 oz., \$6.00.

Miss Universe. The originator describes this Zinnia as "the largest Zinnia I have ever seen. Deep. full flowers in a complete color range, with a bushier, more compact habit than the taller, weedier older Zinnias." Not a true Cactus type. Tr. pkt., 40c; ¼ oz., \$1.25; 1 oz., \$3.75; 4 ozs., \$12.50.

• Peppermint Stick. Bright and varied colors in shades of red, white, yellow, pink, orange and purple more than half of which are attractively striped. Tr. pkt., 35c; 1/4 oz., 75c; 1 oz., \$2.25; 4 ozs., \$7.00.

Ortho-Polka. Similar to Peppermint Stick but larger flowered. Tr. pkt.. 35c; ½ oz.. 75c; l oz., \$2.25; 4 ozs., \$7.00.

• Persian Carpet ALL-MERICA GELECTION 16 in. Compact plants literally covered with medium small flowers in variegated shades of maroon, gold and orange. Especially valuable for bedding. Tr. pkt., 50c; 1/4 oz., \$1.50; 1 oz., \$4.50.

Fantasy Mixture. Formula mixture of all colors in this class. The medium sized flowers have informally curled and twisted petals which produce an attrac tive novelty effect.

Tr. pkt., 30c; 1/4 oz., 60c; 1 oz., \$1.80.

# CUPID TYPE

Dwarf, 12-in. plants producing large numbers of small double (1-in.) flowers. Fine for borders and rock gar

Goblin. Bronzy orange. Pixie. Deep yellow. Snowdrop. Pure white.

Red Riding Hood (Gracillima). Bright crimson.

Prices above 5, each: tr. pkt., 35c; 1/4 oz., 60c; 1 oz., \$1.80.

# **PUMILA TYPE**

"CUT-AND-COME-AGAIN." Between the Giants and Lilliputs in flower size and height.

Canary-Yellow Salmon-Rose Pinkie. Soft pink. Fireball. Scarlet. Snowball. White. Mixture of all colors

Prices above 6, each: tr. pkt., 30c; 1/4 oz., 50c; oz., \$1.50; 4 ozs., \$5.00; 1 lb., \$15.00. Creeping Zinnias. See Sanvitalia, page 47.



PEPPERMINT STICK

BLAZE (Below)



Prices above 11, each: tr. pkt., 30c; 1/4 oz., 50c;

1 oz., \$1.50; 4 ozs., \$5.00; 1 lb., \$15.00.

COLLECTION: Tr. pkt. of each of the 10 named

LILLIPUT FORMULA MIXTURE



MERRY-GO-ROUND

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# **VERONICA** (Speedwell)

PERENNIAL (V. spicata)

250,000 S. 2 weeks 65-75°

Spicata, Dwarf Blue Shades. 16 in. Showy, easily grown plants; brightly colored. Tr. pkt., 35c; ¼ oz., 90c; 1 oz., \$2.70.

# VINCA (Periwinkle)

ANNUAL (V. rosea)

21,000 S. 2-3 weeks 65-75°

One of the most generally satisfactory outdoor bedding plants we have. Will stand an almost unbelievable amount of hot, dry weather. Sow early with bottom heat and grow warm. 15 in.

#### ● COQUETTE =

More compact and shapely than the regular Vinca varieties. Coquette will grow only 10 inches tall, is very uniform, and is an ideal bedding plant, because it is tolerant of hot and dry summers. Color is rosy pink with attractive, glossy deep green leaves. Very free flowering and will bloom continuously from Decoration Day till frost if seed is started February 1 with bottom heat. Tr. pkt., 45c; ¼ oz., \$1.35; 1 oz., \$4.50.

• Twinkles. Soft pink; red eye.

Alba Pura. Pure white.

• Pink. Medium pink.

Alba Oculata. White; red eye.

Crimson

Mixture.

Prices above 6, each: tr. pkt., 30c; 1/4 oz., 60c; 1 oz., \$2.00.

Rose Carpet (New). Has all the good bedding plant qualities of the regular rose-pink Vinca, but the plants are dwarf and spreading rather than upright. Under good conditions each plant will cover the ground for about 2 feet. Also useful as a trailing plant in boxes or baskets. Tr. pkt., \$1.00; ¼ oz., \$3.00; 1 oz., \$9.00.



BE SURE TO INCLUDE ALL OF THE SWEET SIXTEEN VARIETIES ON YOUR SPRING SEED LIST THIS YEAR



VIOLA
Violas bloom more freely than Pansies, and over a longer period.



VINCA, COQUETTE (right) and TWINKLES

Note comparison of habit between Vinca Rosea Twinkles (tall) and Coquette.



# VIOLA

PERENNIAL (V. cornuta)

24,000 S. 2-3 weeks 65-75°

Miniature Pansises. Extra free flowering and effectively used for bedding. Perfectly hardy, 8 in.

Firmament. Free blooming, clear sky-blue.

Jersey Gem. Deep orchid; large flowered and attractive.

**Prices** above 2, each: tr. pkt., **60c**;  $\frac{1}{16}$  oz., **\$1.10**;  $\frac{1}{8}$  oz., **\$2.00**;  $\frac{1}{2}$  oz., **\$6.00**.

- Arkwright Ruby. Maroon with dark center. Bright color.
- Blue Perfection. Large flowered clear medium blue.
- Chantreyland. Extra large flowered true apricot.
- Lutea Splendens. Clear golden yellow.

Papilio. Blue and white combinations. Extra dwarf and free flowering. Puck. Yellow and purple.

- White Perfection. Small pure white.
- Scottish Mixture. Mostly solid colors in shades of white, yellow, blue and purple. Larger blooms than our Large Flowered Mixture.

Large-Flowered Mixture. Mixture of large-flowered varieties.

**Prices** above 10 varieties, each: tr. pkt., **60c**;  $\frac{1}{8}$  oz., **\$1.10**;  $\frac{1}{4}$  oz., **\$2.00**; 1 oz., **\$6.00**.

#### 'JUMP-UPS''

43,000 S. These small, but free flowering Violas make excellent bedding and rock garden plants, blooming continuously from early spring to late fall.

Black Imp (Nigra). Small, velvety, coal-black flowers.

- Blue Elf (Improved Johnny-Jump-Up). Three-colored blooms of deep violet, light blue and gold are freely produced on low-growing plants.
- Helen Mount. A richly colored combination of violet, lavender and canary-yellow. Very free-flowering with narrow bushy foliage.

King Henry. Rich violet-blue with lavender center; yellow eye.

Prices above 4, each: tr. pkt., 60c;  $\frac{1}{8}$  oz., \$1.35;  $\frac{1}{4}$  oz., \$2.50; 1 oz., \$7.50

ODORATA. 9000 S. The popular fragrant "English Violet."

Semperflorens. Deep blue.

Tr. pkt., 60c; ¼ oz., \$2.00; 1 oz., \$6.00.

# WALLFLOWER

**ANNUAL** (Erysimum)

14,000 S. 2 weeks 65-75°

Good bedding plant in cool climates, Also cuts,  $2\frac{1}{2}$  ft, Sow in December and grow in shallow soil (flats are fine) spaced 4x4 for spring cutting.

Gold Standard. Richly fragrant deep golden yellow flowers borne in spikes. Tr. pkt., 65c; ¼ oz., \$2.25; 1 oz., \$6.50.

Perennial Wallflower. See Cheiranthus, page 15.

# YUCCA (Spanish Bayonet)

PERENNIAL' (Y. aloifolia)

1800 S. Frost germinator

Hardy Varieties, Mixture. Striking plants of exotic appearance. Many varieties are included in this blend.

Tr. pkt., 35c; ¼ oz., \$1.00; 1 oz., \$3.00.

# 

Our vegetable seeds are of the same superior quality as our flower seeds. Don't miss out on the increased sale of vegetables this spring. With home building and the sale of home freezers at a national all-time peak, the demand for vegetables for "back-yard" planting should reach a comparable all-time high level. BE READY! Note that vegetable seeds are postpaid.



The Jiffy-Pot symbol marks the varieties best suited for plant sales. We recommend growing them in Jiffy-Pots for superior quality and more profit; however, they may be grown in Veneer Bands, Market-Paks, or other containers listed on pages 102-110.



# **BEANS**

Bountiful. 47 days. Green bush	4 ozs. <b>\$0.30</b>	1 lb. <b>\$0.90</b>	5 lbs. <b>\$3.00</b>
Golden Wax. 51 days. Yellow bush	.30	.90	3.00
Stringless Green Pod. Use Top-Crop			
Top-Crop. 48 days. New, green pencil pod	.30	.90	3.00
Burpee's Bush Imp. Lima. 75 days	.30	.90	3.00

# BEETS

(1 oz. for 60-ft. row). Sow when ground can be worked and make successive sowings until July. Space rows 18 inches. Broadcast seeds in Ball Bands for plant sale.

Detroit Dark Red. (Improved Strain)		\$0.60	
Ruby Queen ALEAMERICA A SELECTION Short top; fix	ne		
color and taste	30	.70	2.10

# **BROCCOLI**

rthrot	(About x24 in.	10,000	seeds	per	oz.)	Sow	in	March.	Space	plant	s 36
								1 oz	. 4 oz		
	Sprout again"s							and t <b>\$0.4</b>	0 \$1.3	35 \$4	1.00

# **BRUSSELS SPROUTS**

		_								
ritypot	(About	7000	seeds pe	r oz.)	Sow	in	March.	Space	e 36x18	in.
AND THE REAL PROPERTY.								l oz.	4 ozs.	1 lb.
•			Imp. 90							
			nd Cabb							
tall,	good ke	eper .						0.60	\$2.00	\$6.00
	Cross									

# CABBAGE

(Danish Grown)

(About 7000 seeds per oz.) Sow in Feb.-March for the first crop and in June for a fall crop. Space earlies 24x18 in., late 36x20 in.

#### YELLOWS RESISTANT VARIETIES

YELLOWS RESISTANT VARIETIES		
In order of maturity.		
l oz.	4 ozs.	1 lb.
Jersey Queen. 63 days. The resistant Jersey Wakefield. Heads are solid, conical\$0.60	\$2.00	\$6.00
Golden Acre Resistant. 65 days. Resistant Golden Acre type. Medium small, round heads	2.50	7.50
Marion Market. Heads a little later and larger than Copenhagen Market	2.00	6.00
O-S Cross X THYBRID See page 61.		
Wisconsin All-Season. Good winter keeper; large, flat hard heads	2.00	6.00
Bugner. 100 days. Round heads; average 10 lbs.		

8 inches diameter. Excellent .......

Wisconsin No. 8. Resistant Hollander .....

# CABBAGE, Continued

STANDARD VARIETIES In order of maturity.  Early Jersey Wakefield. Use Jersey Queen.	l oz.	4 ozs.	1 lb.
Copenhagen Market. A very choice strain. Medium-sized heads; compact	0.45	\$1.50	\$4.50
Early Dwarf Flat Dutch. Heads nearly round, firm; fine flavor and high quality	.45	1.50	4.50
Late Flat Dutch. Good keeper, firm heads	.45	1.50	4.50
Danish Ballhead. Penn State Strain (Short Stem). Best late variety, heads large, flat, solid; keeps until late spring. 105 days	.45	1.50	4.50
SAVOY and RED CABBAGE  Mammoth Rock Red. Best red variety	.60	2.00	6.00

## CARROT

(1 oz. for 300-ft. row.) Sow as early as the ground can be worked and make successive plantings until Aug. 1st. Space rows 12 to 18 in.

Amsterdam Forcing. Roots reddish orange, 6 in.,	4 ozs.	I lb.
uniformly tapered. Earliest\$0.35	\$1.20	\$3.60
Danvers Half Long. Tapering	.90	2.70
Gold Pak, All-America Winner, Long and smooth (8 to 10 inches), bred especially for commercial		
growers	1.40	4.20

# CAULIFLOWER

(About 7000 seeds per oz.) Sow Feb-March, To insure unchecked growth and sure heading, plants should be handled in plant bands or pots. Space 18x24 in.

Early Snowball "A." 55 days. Standard early. Fine for greenhouse forcing, frame or outdoor culture.

Snowball "X." 65 days. Well adapted for use under a wide range of conditions. Heads large, firm and pure white.

Snowdrift. 65 days. Larger than Snowball; firm and well protected by inner leaves. Good for distant shipping.

Prices of above 3, each: tr. pkt., 40c;  $\frac{1}{4}$  oz., 80c; 1 oz., \$2.40; 4 ozs., \$8.00; 1 lb., \$24.00.

# **CELERY**

jilypot

(About 8000 plants per oz.) Sow in Feb. or March for plant sales, Cover seeds lightly. Space 6x28 in. Days indicated are from date of planting.

Golden Yellow Self-Blanching, Cornell No. 19, Long deeply rounded stalk, Yellows resistant.

Summer Pascal. 110 days. Uniform, thick, rounded stalks. Better than Giant Pascal. Crisp, green.

Prices above 2, each: ½ oz., 85c; 1 oz., \$1.50; 4 ozs., \$5.00.

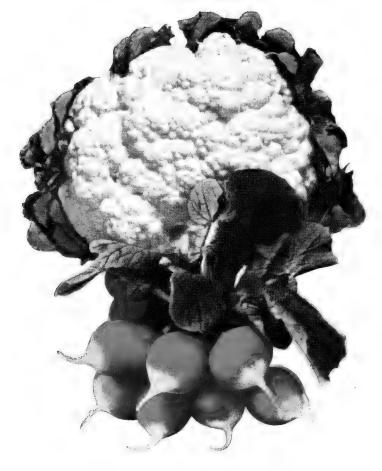
#### CHIVES



See page 61.

(Grass-Onion). A perennial, quickly started from seed. Popular for flavoring and borders. 1/4 oz., 30c; 1 oz., 90c; 4 oz., \$3.00; 1 lb., \$9.00.

#### CORN



# **CUCUMBER**

(About 1000 seeds per oz.), 1 oz. for 80 hills or 200-ft. row. Distance between rows 3 to 6 ft.

Ball Early Hybrid. Thybrid? See page 61.		
Seedless Supreme SHYBRID See page 61.	4 ozs.	1.115
Chicago Pickling. 6 in. 60 days \$0.25		
Straight 8. Deep green; early slicer	1.00	3.00

# **EGGPLANT**

(About 6000 seeds per oz.) Sow in February or March for plant sales. Space plants 18-24 in.

Beauty Hybrid (SHYBRID) See page 61.	4 ozs.	1 lb.
Black Beauty. Popular market variety. Dark purple. Broad, egg-shaped \$0.60		\$6.00
Fort Myers Market. Oval fruits carried well above ground. Quite resistant to disease and excessive heat. ½ oz., 45c80	2.70	8.00
New Hampshire Early. Medium sized, oval fruits bred for northern climate. Prolific85	2.85	8.50

# **KOHLRABI**

KOHEKADI			
(About 7000 seeds per oz.)	1	4	1.11.
	1 oz.	4 ozs.	1 HC.
Early White Vienna. Standard sort for forcing			
and home garden. Globe-shaped	50.40	\$1.25	\$3.75

# LETTUCE

(15,000 seeds per oz.; ¼ oz. for 100-ft, row). Lettuce PLANTS are readily transplanted in plant bands. Sow March 15 or 4 weeks before setting out plants. Space 14x18 in.

	1 oz.	4 ozs.	1 lb.
Grand Rapids Forcing. LOOSE-LEAVED variety.	Mildew-resistant. Best early\$0.30	\$1.00	\$3.00

# Vegetable Seeds for Florists (Continued)

LETTUCE, Continued 1 oz. STANDARD VARIETIES	4 ozs.	1 lb.
Great Lakes. New outstanding HEAD Lettuce; slow to bolt, "All-America" Winner \$0.60	\$2.00	\$6.00
Imperial No. 456 (Cornell). Sure heading in summer	2.00	6.00
berg type with smaller ribs than Great Lakes. Withstands heat	2.00	6.00
Salad Bowl. LOOSE-LEAVED. Early (45 days), stands summer heat very well	2.00	6.00
juget MELON		
MUSKMELON		
(1000 seeds per oz.) 1 oz.	4 ozs.	1 lb.
Golden Delight. A.A.S. Large, early. Hard shell, small seed cavity \$0.50	\$1.65	\$3.50
Honey Rock 85 days. Flesh orange, sweet, and of finest flavor. Fusarium resistant. Good shipper	1.65	3.50
Super Market X HYBRID See page 61.		
WATERMELON		
New Hampshire Midget. Early	1.20	3.50
оніон		
(About 9000 seeds per oz.)		
Early Harvest See page 61.	4 ozs.	1 lb.
Riverside, Utah Strain (Yellow Sweet Span-	4 UZS.	1 1D.
ish). Globe-shaped	\$2.30	\$6.90

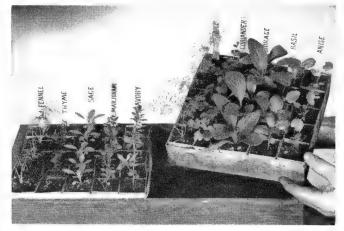
# = HERBS =

6.90

6.90

2.30

White Portugal. All-purpose variety. Fine for sets, pickling, bunching, and mature Onions.



An assortment of Herbs, ready for sale in Ball PlanTrays, makes an ideal merchandising package. Or for the customer who wants to have more of one kind, have flats of 12 or 25 plants of one kind ready. Leaflets describing each variety with collection offers.

Anise Basil Borage Coriander Dill Sweet Fennel Savory Chervil

Prices above 8, each: tr. pkt., 20c; 1 oz., 60c.

Sweet Marjoram Sage
Prices above 2, each: tr. pkt., 20c; ½ oz., 60c.

Thyme Rosemary

Prices above 2, each: tr. pkt., 20c; 1/4 oz., 60c.

## COLLECTIONS

# F1 Hybrid Vegetables (F) HYBRID

(E) HYBRID

# **BRUSSELS SPROUTS**

Jade Cross X HYBRID (New) VALL-AMERICA AS SELECTION / The most prolific variety ever produced.  $\frac{1}{16}$  oz., 60c;  $\frac{1}{4}$  oz., \$1.80; 1 oz., \$6.00; 4 ozs., \$20.00.

# CABBAGE

O-S Cross (New) VALL-AMERICA & SELECTION Very large, midseason variety. Uniform heads. 1/4 oz., \$1.25; 1 oz., \$3.20; 4 ozs., \$10.60.



CABBAGE, O-S CROSS



F1 HYBRID BRUSSELS SPROUTS, JADE CROSS

# CORN

Gold Crest THYBRID New, wilt-resistant, high quality, early yellow hybrid. 4 ozs., 40c; 1 lb., 95c; 5 lbs., \$4.00.

Golden Cross. 85 days. 4 ozs., 35c; 1 lb., 85c; 5 lbs., \$3.50.

# **CUCUMBER**

Ball Early Hybrid. Heavy yielder, Size similar to "Straight 8", color dark green. It is a white spined, slicing type, earlier than Burpee Hybrid. Resistant.

Tr. pkt., 50c; ¼ oz., \$1.40; 1 oz., \$4.20; 4 ozs., \$12.50.

Seedless Supreme. Best of the European forcing types. Will outyield any outdoor variety we know. Form 12-14 in. fruits without pollination, is seedless unless pollinated. Dark green, disease-resistant, very prolific when forced in high humidity at 75-85° temperature.

# **EGGPLANT**

Beauty Hybrid. Our trial ground proved this new Ball Hybrid to be considerably earlier and more productive than the regular Black Beauty. Fruits are a little more oblong and are produced on strong,

 $\frac{1}{8}$  oz., \$1.45;  $\frac{1}{4}$  oz., \$2.60;  $\frac{1}{2}$  oz., \$4.30; 1 oz., \$7.80.

# MUSKMELON

Super Market. 85 days. Thick, deep salmon flesh of excellent flavor: an exceptionally heavy yielder. Resistant to fusarium and downy mildew. 100 seeds, \$1.75; 500 seeds, \$7.90.

# TOMATOES

Ball Extra Early. 55 days, An F<sub>1</sub> Hybrid earlier than Earliana, Medium fruits, extremely smooth. Bred for highest quality fruit and earliness.

Tr. pkt., \$1.00; ½6 oz., \$2.25; ½ oz., \$7.50; 1 oz., \$25.00; 4 ozs., \$82.00.

Ball Giant Hybrid. 65 days. Early, red, large fruits. It is about two

weeks later than our Ball Extra Early. Tr. pkt., \$1.00;  $\frac{1}{16}$  oz., \$2.50;  $\frac{1}{8}$  oz., \$4.50;  $\frac{1}{4}$  oz., \$8.50;  $\frac{1}{2}$  oz., \$16.00; 1 oz., \$30.00; 4 ozs., \$98.00.

Burpee Hybrid. Medium sized; average 8 ounces in weight. Tr. pkt., \$1.00; ½ oz., \$3.50; ¼ oz., \$6.00; ½ oz., \$11.00; 1 oz., \$21.00; 4 ozs., \$65.00.

Burpee Big Boy Hybrid®, 78 days. Fruit to 1 pound. Note that this

variety has 9000 seeds per ounce. Tr. pkt., \$1.00;  $\frac{1}{16}$  oz., \$2.50;  $\frac{1}{8}$  oz., \$4.50;  $\frac{1}{4}$  oz., \$8.50;  $\frac{1}{2}$  oz., \$16.00; 1 oz., \$30.00; 4 ozs., \$98.00.

#### TUCKCROSS O, FORCING (New)

Wonder Boy. Extremely large, red.

quality Tomatoes of excellent flavor.

(Tucker's Forcing X Ohio WR3). Red fruited. Average size 5 to 7 ounces. One of the line of F<sub>1</sub> Hybrids developed especially for forcing by Prof. Lambeth of Missouri. Fruits are very smooth, meaty. Highly disease resistant. Very well adapted to growing in plastic houses.

Tr. pkt., \$1.25;  $\frac{1}{16}$  oz., \$3.30;  $\frac{1}{4}$  oz., \$11.00; 1 oz., \$33.00.





# Vegetable Seeds for Florists (Continued)

## PARSLEY

PARSNIP

(1½ ozs. per 100-ft. row). Sow early, space rows 18 in. Roots hardy.

1 oz. 4 ozs. 1 lb.

Short, Thick. 100 days. Finest and earliest strain.

Pulls easily, sweet delicate flavor . . . . . . . . \$0.25 \$0.70 \$2.10

# **PEAS**

F	1 lb.	
um\$0.30	\$0.90	\$3.00
Little Marvel. 64 days. Dwarf	.90	3.00

## PEPPER

(About 3000 seeds per oz.) Sow 6 weeks before outdoor planting. Germinate seeds warm. Space plants 16x24 in. Days indicated are from date plants are set out.

	1 07	4 ozs.	1.1h
California Wonder Select. (Sweet.) 72 days. Standard of excellence in Sweet Peppers. Extra thick walls			
Chinese Giant. (Sweet.) 80 days. The largest Sweet Pepper	1.00	3.35	10.00
Golden Wonder. Golden fleshed California Wonder type	1.00	3.35	
Harris' Early Giant. See Vinedale.			
Hungarian Yellow Wax. (Hot.) Tapering, $6\frac{1}{2}$ in. long. Very early. Plants small, productive\frac{1}{2} oz., 50c	.90	3.00	9.00
Long Red Cayenne. (Hot.) 70 days. For pickles, canning or drying	.60	2.00	6.00
Merrimack Wonder. (Mild.) Thick flesh. Recommended where growing season is short.	.95	3.35	9.50
OakviewWonder.(Sweet.)65 days.(Early California Wonder.)CaliforniaWonder.)	1.20	4.00	12.00
Pimento (Perfection). (Sweet.) 72 days. Fruits smooth, conical	.75	2.50	7.50
Red Chili. Numerous 2-2½-in, long fruits. Borne upright. Very pungent ½ oz., 40c	.75	2.50	
<b>Ruby King.</b> (Sweet.) 68 days. Very productive	.65	2.20	6.50
Sunnybrook. (Sweet.) Tomato-shaped fruits. Turn scarlet-red earlier than most other Peppers. 70 days	.75	3.00	7.50
Sweet Banana (Sweet Hungarian). Tapering, 6½ in. long ½ oz., 60c	1.00	3.35	10.00
Sweet Bull Nose (Sweet Mountain), Mild-fleshed. 65 days	.65	2.20	6.50
World Beater. (Sweet.) 70 days. Large, oblong,	60	2.00	6.00

Vinedale. (Sweet.) All-America Winner. Some-

Yolo Wonder. (Sweet.) 70 days. Mosaic resist-

ant ..... $\frac{1}{2}$  oz., 50c..

Small Sugar Pie. Early orange .....

Large Yellow or Connecticut Field .....

**PUMPKIN** 



PEPPER, YOLO WONDER
The mosaic-resistant strain developed by Dr. Porter (of Campbell Soup Co.) Flesh very thick. California Wonder type.

# **RADISH**

(1 oz. for 100-ft, row.)	l oz.	4 ozs.	1 lb.
Cherry Belle. 23 days. Round, red and very crisp\$			
Early Scarlet Globe (Short Top). 23 days. An ideal florists "catch crop"	.25	.45	1.35
lcicle. 27 days. Best white for outdoors and forcing	.25	.45	1.35
SPINACH			
(1 oz. for 100-ft, row.)  Giant Thick-Leaved (Nobel.) 45 days	.25	.40	1.20
New Zealand (Tetragonia), Picked throughout the summer. Suitable for greenhouse forcing in 50-60° temperature	.25	.40	1.20
SQUASH			
(About 380 seeds per oz.)			
	.40	1.25	3.75
Early Prolific Straightneck. 50 days. Summer Squash. Edible when 4 to 14 in	.30	1.00	3.00
SWISS CHARD			
(1 oz. for 100-ft. row.)			
Lucullus. Deep green crumpled leaves. Cool house temperature. Pick leaves	.25	.75	2.25
TURNIPS			



# GROW VEGETABLES IN JIFFY-POTS

.40 1.25

You can get a premium price for well grown vegetables, such as the Pepper at left, in Jiffy-Pots. Your customers find earlier production and vigorous growth of Jiffy-Potted vegetables well worth the extra cost. Plants never wilt in transplanting—never suffer set-back. See pages 108-110.

2.50

2.50

2.00 6.00

3.35

3.00



TOMATO, WONDER BOY IN JIFFY POT

John Baer, Certified. Standard all-purpose variety, second early, medium size, red . . .

Jubilee. Orange; NON-ACID. All-America bronze

medal winner .....  $\frac{1}{2}$  oz., 50c..

Master Marglobe Supreme, Certified. Valuable for shipping and HIGHLY RESISTANT. 75 days.

Oxheart. 90 days. Extra large, heart-shaped, few

seeds, mild flavor. NON-ACID . . . ½ oz., 70c . .

Pink Shipper, Certified. (U.S.D.A.) Best com-

seeds, mild flavor, 85 days . . . . .  $\frac{1}{2}$  oz., **50c** . . Pritchard (Scarlet Topper). Fine all-around va-

Red Top. Improved Italian Canner. Cylindrical,

Rutgers, Certified. Red, smooth, thick wallsfirm and mild. Does well even at a low fertility

level. Favorite in sandy soil . . . . . ½ oz., 50c. .

 $\dots$  1.00

Extra select stock . . . . . . . . .  $\frac{1}{2}$  oz., 70c . . 1.20

mercial pink. 80 days ......... $\frac{1}{2}$  oz., 70c.. 1.20 Ponderosa. Extremely large; purplish pink, few

Italian Canner. See Red Top.

June Pink. Try Pink Shipper.

# **Vegetable Seeds for Florists (Continued)**

# **TOMATOES**

(About 7000 seeds per oz.) We offer only the highest quality Tomato seeds from specialist growers. Sow seed 6 to 8 weeks before time to plant out. Days indicated are from date plants are set out.

#### SPECIAL FORCING VARIETIES

Ball Extra Early. X PHYBRID Very successfully used for forcing. See page 61.

Tuckcross O. Forcing. X HYBRID See page 61.

Waltham Mold-Proof Forcing. The ideal forcing Tomato. Even sized, 4-oz. scarlet fruits, firm, good shippers, do not crack. Flowers self-pollinating. Early. Immune to leaf mold. Tr. pkt., 50c; ¼ oz., \$1.00; 1 oz., \$3.00.

Michigan State Forcing. Wilt resistant. Deep scarlet fruits, average 5-6 ozs., globular, in large clusters. Flowers self-pollinating. Tr. pkt., 25c; ¼ oz., 50c; 1 oz., \$1.50.

Ohio W-R3 Globe. WILT RESISTANT. Pink fruits a little larger than regular Globe. Tr. pkt., 50c;  $\frac{1}{4}$  oz., \$1.00; 1 oz., \$3.00.

Not hard to sell plants like this!			
not hard to sen plants like this.	STA	ANDARD	VARIETIES
l oz.	4 ozs.	1 lb.	1 oz. 4 ozs. 1 lb.
Ball Extra Early. TETHYBRID: See page 61.	- 0		Stokescross No. 5. This is an F <sub>2</sub> strain grown
Ball Giant Hybrid X HYBRID See page 61.			from $F_1$ seed, 82 days, $Tr.$ pkt., $75c$
Burpee Hybrid XEPHYBRID See page 61.			
Burpee Big Boy Hybrid ANDRIDG See page 61.			fine canning variety $\dots \dots \frac{1}{2}$ oz., 50c85 2.80 8.50
Bonny Best (John Baer reg.) Smooth and firm. 73 days	\$2.00	\$5.90	Stone. 85 days. Valuable for market and canning; heavy producer; deep scarlet
Break O' Day. Early WILT-RESISTANT, globe-shaped. Heavy producer, flesh firm. ½ oz., 45c80	2.70	8.00	Sunray. Golden yellow, wilt resistant. Mild flavored, meaty. Finest yellow variety. 85 days.
Caro-Red. New Purdue variety. Orange-red Rut-			$\frac{1}{2}$ oz., 45c75 2.50 7.50
gers type, contains 10 times more Vitamin A than other Tomatoes. Fine, distinctive flavor. 75 days	4 00	12.00	Super Sioux. Scarlet. New strain of an old favorite. 70 days
Crimson Cushion or Beefsteak. Large, flat, bright	1.00	12.00	very compact growth. 78 days ½ oz., 45c 80 2.70 8.00
scarlet; solid, very prolific ½ oz., 55c. 1.00	3.30	9.90	Valiant. 70 days. Globe-shaped, large, smooth red fruits
Dwarf Champion. Try Urbana.			Victor. Try Urbana.
<b>Earliana.</b> Medium size, deep scarlet, firm and smooth. 64 days. Fine early variety. ½ oz., <b>50c90</b>	3.00	9.00	Wisconsin Chief. New Univ. of Wisconsin introduction. Replaces Wisconsin No. 55. Very large red fruits; high yielder. 70 days. ½ oz., 70c 1.20 4.00 12.00
Early Detroit. Valuable for shipping. Pink, medium large, smooth fruit. 78 days. ½ oz., 45c80	2.70	8.00	Red Cherry Yellow Plum Small fruited, for pickles, 1 oz. 4 ozs.
Firesteel. 70 days. Deep red, sure setting. Best under drought conditions ½ oz., 40c	2.35	7.00	Yellow Pear   salads or preserves   \$0.75 \$2.50   Yellow Husk or Ground Cherry
Giant Tree or Potato Leaved. 90 days. Extra			TINY TIM
large pink fruits often weighing 1 lb. or more	12.00	36.00	13,000 S. A novel miniature Tomato that can be raised as a color- ful, small pot plant in the home. Ideal appeal to the housewife as
Gulf State Market. Very fine second early, crimson, medium size, very solid ½ oz., 45c80	2.20	8.00	she can add a touch of color to her winter-time menus and have a plant at the same time. ½6 oz., 30c; ¼ oz., 90c; 1 oz., \$2.70.
Indiana Baltimore. Heavy yielding "Stone" type.			
Popular canner; deep scarlet, 80 days	1.70	F 00	

TOMATO. BALL **EXTRA** 

**EARLY** 



3.00

4.00 12.00

4.00 12.00

4.00 12.00

9.00

7.50

9.00

3.00

2.50

3.70

3.00

.90

1.20

1.10

.90

# BALL PLANTS



Per 1000

\$130.00

180.00

100.00

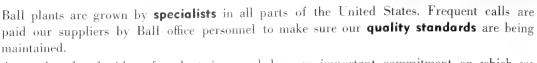
125.00

125.00

125.00

125.00

100.00



Any order placed with us for plants is regarded as an important commitment on which we will follow through. Try us for your next plant requirements.

Limitation of Warranty. Geo. J. Ball, Inc., warrants to the extent of the purchase price that seeds, plants, bulbs, or other materials sold are as described on the container within recognized tolerances. Seller gives no other or further warranty, expressed or implied.

Terms: All Plant Dept. orders are billed with a 2% discount for payment 10 days from date of invoice. All invoices are due and payable 30 days after invoice. Make checks or money orders payable to Geo. J. Ball, Inc., West Chicago, III.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE



Mrs. Arvilla Kerst is well known to many of our customers through her able management of our Plant De-partment which is responsible for all the items offered on the next 18 pages.

# Carnation Cuttings

# GENERAL LIST

We offer rooted cuttings of the following varieties. Our propagators are the country's leading Carnation specialists. We offer our cuttings with every confidence that you'll find them as fine or finer than any other cuttings on the market. Available Nov. 1 through June.

WHITE Per 100	Per 1000	MEDIUM PINK
DIVINITY (New). (Res.) White sport of Majestic       \$20.00         *Electra. Large, informal white       15.00	\$150.00 125.00	Citation. Rose-pink
Hoosier Spice (Res.) Pure white, good producer. 100-225, \$15.00 per 100; 250-975, \$13.00 per 100	110.00	250 cuttings for \$50.00
*Improved Olivette. Larger and cleaner than Olivette	100.00 125.00 115.00	Boston. Dark pink, Very productive
*White Apollo. White sport of Apollo	115.00 125.00	Imp. Sidney Littlefield. Virus free, better growth, much better color
field         15.00           White Sim. Pure white sport of Wm. Sim         15.00	125.00 125.00	Virginia Miller. Dark pink Virginia 12.00
LIGHT PINK  AKAWEE (Res.—New). Delicate light pink. Sold under agreement. 250-750, \$18.00 per 100; 1000 up, \$17.50 per 100. Minimum order 250		
By Golly. Light pink sport of Sim	150.00	
per 100	110.00 125.00	
Nancy Thomson. Light pink. Sport of Sidney Little-field	125.00	
Pink Beauty. Sport of Pink Sim 15.00 Pink Sim. Light pink 15.00 Virginia Hercules. Large sport of Virginia 15.00	125.00 125.00 130.00	
Apollo. Widely accepted salmon-pink	100.00 115.00	
Braun's Sim (Res.) Deep salmon-pink sport of Sim. 250-450, \$20.00 per 100; 500-950, \$18.00 per 100.  Calypso Sim. Deep shrimp-pink sport of Wm. Sim. 15.00	160.00 125.00 150.00	
Debbie. Salmon sport of Sim	125.00	A Second

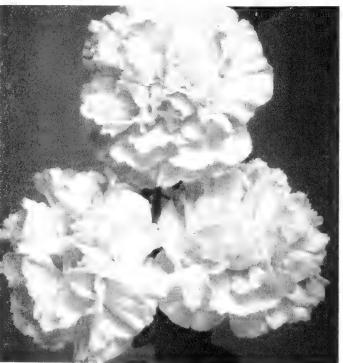
Keefers Cheri Sim. Bright deep salmon-pink; large flowers, few splits, 100-225, \$20.00 per 100; 250-

SALMON NANCY THOMSON (New). Delicate

Salmonaise. Salmon-pink sport of Virginia . . . . .

Shibuya Sim. (Res.) Medium salmon-pink sport of

Mamie. Minimum order 250 cuttings for \$37.50... Shocking Pink Sim. Brilliant dark salmon . . . . . . 15.00



PINK SIM

salmon-pink

\*Salmon Sim. Salmon-pink . . . .

160.00

125.00

125.00

125.00

125.00

150.00

125.00

15.00

15.00

15.00

# Try This Brand New Type of Cut Carnation

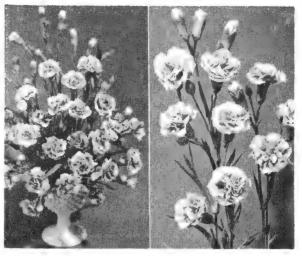
# - Elegance -

# The FIRST in a New Class of MINIATURE CARNATIONS

Elegance is a rose-pink and white sport of Exquisite. By taking out the terminal bud and letting the remaining lateral buds open, a graceful spray with from 4 to 8 miniature flowers will develop. These sprays lend themselves well for use in arrangements and bouquets. The individual flowers are excellent for use in corsages. The new colors of this line of miniature Carnations are now on trial and will be ready for dissemination in the near future. This variety will be restricted under growers agreement for three years.

**\$20.00** per 100; **\$180.00** per 1000. 250 or more at the thousand rate.

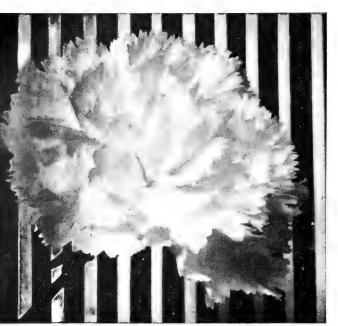
MINIMUM ORDER 100.



Note the graceful sprays of flowers and buds and how tastefully they can be used in flower arrangements. The individual flowers are ideal for corsages for Milady and boutonnieres for Men of Distinction.

# GENERAL LIST, Continued

CRIMSON and RED		ORCHID and PURPLE	
Per 10	0 Per 1000	Per 100	Per 1000
*Cardinal Sim. Color similar to King Cardinal \$15.00		Exquisite. Purple, orchid edge\$15.00	\$125.00
Congo. New crimson	125.00	Hoosier Princess (Res.) Lavender-pink that glows	
Crimson King. Bright crimson 15.00	125.00	pink under artificial light. Flowers are large and	
Crimson Prince. Crimson seedling		full with few splits. 100-225, <b>\$15.00</b> per 100; 250- 975, <b>\$13.00</b> per 100	110.00
Dark Red Sim. Dark scarlet sport of Sim 15.00		LAVENDER AND LACE (New). Seedling 20.00	150.00
Denver Red Sim. Improved Wm. Sim 15.00 Ember Sim. Red sport of Wm. Sim 15.00			
Imp. Red Sim. Larger and fuller bloom than Wm.	123.00	Orchid Beauty, Novelty	125.00
Sim	125.00	Purple Littlefield. Deep purple 15.00	125.00
Jumbo Cardinal. Improved Cardinal. 100-225,			
\$15.00 per 100; 250-975, \$13.00 per 100	. 110.00	NOVELTIES	
Majestic (Res.) Cross of Wm. Sim. Larger, brighter red 20.00	150.00		135.00
Mrs. C. W. Weld. Crimson; clean healthy grower. 15.00		Anniversary. Shade darker than Scarlet Sim 15.00	125.00
Red No. 16. Same color as King Cardinal 12.00		Candy Lee. White with red	125.00
Red Gayety. Clear red. Same growing habits as Gay-		*Cooper's Var. Sim. White with red markings 15.00	125.00
ety		*Gayety. White with red streaks 15.00	125.00
Red Sim. Strain of Wm. Sim		Hollywood Sim. Light pink petals with red overlay. 18.00	150.00
Tom Knipe (Pat.) Large red, full flower. 100-225,	123.00	*Variegated Lavender Littlefield. Orchid with pur-	125.00
<b>\$15.00</b> per 100; 250-975, <b>\$13.00</b> per 100	. 110.00	ple stripe	125.00
*Topper. Rich velvety maroon	0 125.00	Lavender Rose. Lavender-rose seedling 15.00	_
Wm. Sim (Pat.) Vivid red seedling 15.00 Wooster Searlet Red	0 125.00 0 100.00	*Mamie. White with red streaks	125.00
Wooster Scarlet. Red	0 100.00	Mohawk. Yellow variegated with pink stripes 15.00	125.00 125.00
		Mrs. Christian Herter. Similar to Pelargonium 15.00	
YELLOW		*Nectar. Large orange-yellow-scarlet striping 12.00	110.00
		Peking Pink Littlefield. Dark pink to scarlet with white tip	125.00
Braun's Yellow Sim (Res.) Lemon-yellow with Sim's vigorous growth. Minimum order, 250 cuttings,		Pelargonium. Mottled crimson	125.00
20c each; 500-950, 18c each; 1000 or more, 16c		*Peppermint Sim. Red and white with red penciling. 15.00	125.00
each.		Pikes Peak Sim. Flushed pink with frosting 15.00	125.00
Brigadoon (Res.) Clear lemon-yellow. Parentage,	200.00	Pride of Woburn. Maroon	125.00
Sim and Miller's Yellow. Minimum order 500		*S. Arthur Sim. White with red stripes 15.00	125.00
*Harvest Moon. Buff-yellow		Sara Jane Knipe (Pat.) Brilliant rosy magenta, sil-	
Hoosier Gold (Res.) Yellow with faint pink stripes.		ver edges. 100-225, \$15.00 per 100; 250-975,	
Not a variegated, 100-225, \$15.00 per 100; 250-	110.00	\$13.00 per 100	110.00
975, \$13.00 per 100	. 110.00 0 125.00	*Scarlet Sim. Sport of Sim. Similar to Scarlet King. 15.00	125.00
*Midas. Good yellow	0 110.00	Symphony. (Pat.). Mauve with reddish purple	
PAJEE (ResNew). Deep yellow with light pink		stripes. 100-225, \$15.00 per 100; 250-975, \$13.00	110.00
flecking. Sold under agreement. 250-750, \$18.00		per 100	110.00
per 100: 1000 up, \$17.50 per 100. Minimum		Tetra-Sarah Jane (Pat.) Large flowered magenta. Silver edge	200.00
order 250			
Harvest Moon. 100-225, \$15.00 per 100; 250-975,		Minimum quantity, 100 of a variety unless specified otherwise	se. 250 or
\$13.00 per 100	. 110.00	more of a variety at the 1000 rate. Shipped from Mass., Colora	ido, Uhio,
Yellow Sim. Golden yellow similar to Harvest		Connecticut, and Indiana.  *Also available from Yoder Bros. See pages 66 and 67 for p.	rices.
Moon 15.0	0 125.00	Theo available from Total Educative pages to and of for pages	



#### IMPROVED OLIVETTE

# Carnation Cuttings

# YODER BROS. LIST

WHITE

Price

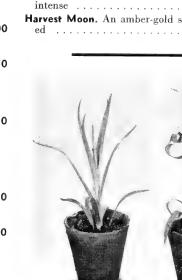
WHITE	50 Only
Aurora. Exceptionally large white. Flower size and heavy stem are points emphasis. Performs best in higher than average Carnation temperatures, with a narrow range of difference between day and night temperatures. average to heavy producer	and An
Electra. Large informal white. Petals are deeply serrated. Exhibits the vig stretch, and production of White Sim with an improved stem for winter flering. Does not split	ow-
Improved Olivette. A more vigorous, taller reselection of Olivette	5.00
Colo. White Sim. Holley's reselection of White Sim. Most important asse its non-splitting trait	
Imp. White Sim. Large white sport of Wm. Sim. Best under high winter lintensities to improve stem strength	
White Apollo. White sport of Apollo. Unequalled for year-round productive A marked improvement over Olivette for flower size and stem strength during the winter months. More versatile than Apollo since it is not subject to fing and has an improved summer form	ring fad-

#### SCARLET-RED

Cardinal Sim. Large scarlet-red sport of William Sim. The most vigorous and productive of the red Sim sports. Less petal serration. Rarely splits	5.50
Colo. Red Sim. An improved William Sim. Greater vigor and productivity  Hill's Red Sim. Sport of Wm. Sim. Outstanding for its improved	5.50
vigor, stretch and rapid cropping habit. Flowers are somewhat larger, being similar in form and color to Wm. Sim. The longer stems of good rigidity are especially valuable on the early crops.	5.50
STEPHEN'S RED APOLLO (New). Apollo sport. Bright salmon- red. Flower is fuller, larger and much brighter color than orig- inal Red Apollo. Stems are longer with over-all vigor significant- ly greater than Apollo	7.00
Siren. A bright scarlet. Combines heavy production with a fast comeback and uniform cropping on stems of medium length	

# ....

YELLOW	
No. 2 MIDAS (New). An improved vigor selection from Midas. Length and strength of stem are markedly greater. Color remains the same. Form and size are more uniform	F F0
Imp. Miller's Yellow. An improved color selection from Miller's Yellow. Formerly known as "Shirley Ann." Color is clear and	5.50
intense	5.50
ed	5.50





Carnations in Jiffy-Pots—a method that has found increased favor among Carnation specialists. Left photo cuttings just potted, center photo ready to pinch (at pencil point), right photo plant after 6-8 weeks, ready to bench. Cuttings grow rapidly and break well, no disease problem, and of course pot and all can be benched, saving labor. The important point: set cuttings just as high as possible in the pot, and when benching pot and all, set the soil ball half an inch or so above the bench level. Helps prevent rot.

# LIGHT PINK

Aphrodite. A true light pink. An early producer with an early comeback. Best in high light intensity areas ......\$5.50

	Pink Sim. Peterson's flesh-pink Sim sport	5.50		
	Virginia Hercules. Well known for its form, color and keeping quality. Air cooling has extended its period of value	6.00		
	SALMON-PINK			
	Ambrosia. A smooth and unvarying salmon-pink. A shade lighter than Venus. Unusual stretch and rigid stemmed growth during the winter months. A durable flower for shipping	6.00		
	No. 2 APOLLO (New). An improved selection in Apollo with larger flower size and markedly increased stem length. Color remains the same as Apollo. The improved vigor in stem and size is evident throughout the year	5.00		
	Athena. A lustrous salmon-pink slightly deeper than Venus and possessing a greater color clarity than Apollo under low light intensities. A reliable winter producer. Has vigor, stretch, and rigid stems. Does not split	5.00		
	Salmon Sim. Peterson's light salmon colored Sim sport. Identical in growth characteristics to Pink Sim	5.50		
	<b>Venus.</b> A large, salmon-pink. Flawless color. Like Charm, possesses superb flower qualities coupled with a long, rigid stem. A noted exhibition variety. Performs most satisfactorily at Little-field temperatures	5.50		
	DARK PINK			
	Hermes. A good dark pink with high temperature color-retention tolerance. Becomes a scarlet-pink during the winter months. Ships and keeps well. Rarely splits	5.50		
	Mentor. Rich rose-pink. Strong, rigid stems. Notable keeping and color retention properties throughout the year	5.50		
CRIMSON-RED				
	Titan. An intense crimson-red. Dependable and continuous growth during the winter months. Recognized for its better than average shipping and keeping qualities among the crimson group.	5 50		

shipping and keeping qualities among the crimson group ..... 5.50

Topper. Crimson-red. Very clear, bright color with medium sized flowers. Fine stretch with wiry, strong stems. Very productive, free growth. Does not split ...... 5.50

Price

50 Only

# YODER BROS. CARNATION CUTTINGS, Continued

Grog Ball

Price

# NOVELTIES, VARIEGATED, ETC.

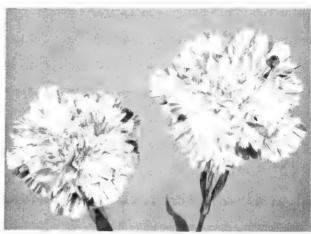
	Price Only
Strawberry Sim. Variegated red and pink Sim sport. An over-all narrow red penciling diffused on a pink background. Background color markedly intensifies going into midwinter conditions. A striking novelty	
S. Arthur Sim. Sport of Cardinal Sim. Uniform, narrow scarlet-red bands on a pure white background. Very stable to color and pattern. Size is larger and stems are stronger than average for Sim varieties. Splitting is no problem. An outstanding variegated Sim	
Peppermint Sim. Pearson's selection. Pure white background with red penciling. Uniform and stable throughout the year. Good solid flower with little splitting. Somewhat taller than S. Arthur Sim	5.50
Gayety. Variegated Sim. Flesh-pink background overlaid with bright red pencil pattern. More stable than Cooper's Variegated.	5.50
Cooper's Variegated. Light pink background with medium to large red pencil markings. One of the fastest and most reproductive of the Sim sports	5.50
Mamie. Variegated Sim sport. White background overtoned with thin red pencil striping	5.50

_		OU Only
Scarlet	Sim. A tone on tone Sim sport, Color ranges from an in	n-
tense	scarlet at the base of each petal to a frosty white at the	ie
petal	margins. Color becomes most intense under low temperature	a-
ture	winter conditions	. \$5.50

Agate Athena. Sport of Athena. Dark salmon bands and pen	
on salmon pink background. Has the same vigor, high pr	
tion, strong stem and non-splitting character of parent va	
A very refreshing, lively color with good high temperature	sum-
mer retention	6.5

Cassandra. A	lively yellow variegated.	Pink penciling. Rarely splits.	
Flower has	excellent substance and	is an outstanding keeper	5.50

Nectar. Large orange-yellow variegated with broad scarlet striping. 5.50



GAYETY

# PRICES FOR MORE THAN 50 OF A VARIETY ON ONE SHIPMENT

Effective Aug. 1, 1958

Prices apply to the number of cuttings of any one variety on an order.

rrices apply to the number of cuttings of	i diliy (	one variety	on an or	uci.		
50 only\$	5.00	\$ 5.50	\$ 6.00	\$ 6.50	\$ 7.00	\$ 7.50
50-250 per 100	10.00	11.00	12.00	13.00	14.00	15.00
300-450 per 100	9.50	10.50	11.50	12.50	13.50	14.50
500-950 per 100						
1000-2450 per 100	8.50	9.50	10.50	11.50	12.50	13.50
2500 up per 100	8.00	9.00	10.00	11.00	12.00	13.00

# PROPAGATION VS. SPECIALISTS' CUTTINGS?

During the past 5 or 10 years it has become almost standard practice to use cuttings from specialist propagators. Reasons for this in the Mum industry are worth noting:

- 1. Freedom from disease—again not 100%, but in general the specialist propagator's stock is free of the difficult diseases that can make so much trouble with both Mums and Carnations.
- 2. Simplification of the growing operations. With more precise schedules becoming the practice in Carnation growing it is necessary to have the well rooted cuttings, the right varieties, and the right proportions of colors available on the right date to meet plant cropping schedules. It is extremely difficult for an individual grower to have enough stock area to produce the desired quantity and varieties of cuttings for the exact dates wanted. This problem has been a major reason for Mum growers' switching over to specialist propagator's cuttings.
- 3. Economy. This is a hard point to realize when bills for cuttings must

be paid, but it is even harder for most growers to realize the actual dollars and cents cost that goes into maintaining stock beds, insect disease control on them, the labor of making and rooting cuttings, etc. These tend to be hidden costs and therefore not generally appreciated. The realistic way to look at this question is—how much dollar revenue can be gained by putting the same area and the same amount of labor that is now in Carnation stock into some other revenue-producing crop?

There has been a definite trend the past several years toward more and more growers' availing themselves of the high quality, reliable cuttings produced by Carnation propagators. We believe this trend will be accelerated in the several years ahead of us. To some extent this is only an extension of the long range trend in our industry toward specialization—each fellow doing the part of the job that he can do best. After all, if a man specializes in one small part of the job, devotes all his energies, abilities, and management talent to doing that part of the job well, it stands to reason that he is on the long haul going to do it better and at lower cost than the fellow who tries to do a little of a lot of things.

# Successful Carnation Culture

# GOOD GROWING PRACTICES

First proposed in the early 50's, the plan briefly is to plant Carnation cuttings directly to the flowering bench at final spacing just as is done with Mums. Usually the cuttings are planted from around March 1 till June 1. The advantages are:

- 1. The saving in labor is very substantial.
- 2. Under favorable conditions and if properly done, definitely heavier, more rapid growth and better production can be achieved with direct
- 3. If properly carried out, there is less chance for disease with direct benching.
- 4. The possibility of cropping certain colors that are wanted at certain seasons—for example, red for Christmas.
- 5. Control production of flowers-heavier during periods when flowers are wanted, etc.

The disadvantages are:

- 1. Difficult to get cuttings established and into growth rapidly, especially during hot weather.
- 2. Sometimes many of the plants are lost. It is almost always associated with summer heat; but direct benching cuttings back in March and April means throwing out a flowering bench before the crop is through.
- 3. The tendency of direct planted crops to produce heavy production peaks (2 of them the first year)-and not always at the time they are wanted.
- 4. The bench is tied up an extra 5 to 6 weeks longer at a time when space is at a premium. Conversely, the old crop must be thrown out in midspring, just when flowers are wanted.

Direct planting is used most heavily by Carnation specialists, and most of them use it in combination with various schemes of nursery bedding or of Jiffy-Potting to fill in the production gaps and to enable them to leave part of their old crop to flower through May and June.

Probably the most commonly used and practical of the direct benching schedules is something like the following:

June 11—Direct bench cuttings (Sims varieties).

July 2—Start the first pinch (high pinch, each plant as side shoots show).

Aug. 8-Start second pinch, the most advanced shoot on each plant until two are pinched on each plant,

Oct. 15-Start steady substantial cut of Sim varieties (around 1 flower per sq. ft. per week). Reasonably steady production is continued through the winter and spring.

Note: Above schedule is a typical "pinch and a half" crop.

Where the loss of production in May and early June is the problem, there is a schedule worked out by Dr. John Seeley which, with Sims varieties, will help. It follows:

June 15-Direct plant cuttings 7 x 7 in.

July 15-Most cuttings should have side shoots cleared and be ready for a soft pinch. No second pinch on any plant.

Nov. 1 to Jan. 15, first crop-4 flowers per sq. ft. for December alone reported by one grower.

April 5 to June 15, second peak for crop from the above plants—just about right to fill in the May June gap resulting from other benches being torn out.

#### Watering and Feeding

How often to water? It certainly can't be done on a schedule. In general soak thoroughly when you do water. Probably the biggest problem in winter is one of overwatering. As a rule, it is a good thing to allow the soil to become dry enough so that it will make a ball that will crumble. Be sure to check the center of the bench, not the edges.

About feeding: It would seem a fair general statement that 30-40 parts of nitrogen and potash should be maintained through the spring, summer and fall, and that at least enough nitrogen and potash be applied in the winter to keep a low test showing, and to keep the plants in good color,

Carnations are known to need calcium especially. Normally 150 ppm should be maintained. Add gypsum if calcium is needed. Phosphorous is usually supplied by annual addition of 3 lbs, per 100 sq. ft. (40%).

# INSECT AND DISEASE PREVENTION

Much of this battle with Carnation diseases-and insects too-can be won by a well planned and carefully followed preventive program. This is particularly true of the perennial problem of Carnation plants rotting off a month or two after benching. Actually there isn't too much that can be done to stop this very serious problem once it appears. However, there are several important preventive measures that should be taken:

- 1. Very carefully sterilize all soils, flats, old flower pots, etc., used in connection with the crop.
- 2. Use as nearly as possible disease-free cuttings. In general, cuttings from specialist propagators will be free of disease.
- 3. Careful watering practices, especially the first months after benching. Overwatering, and also failure to get ventilation in the house in the morning will create high humidity which definitely favors most of these diseases.
- 4. Terraclor treatment of soil just prior to benching plants.

#### CUT THE FIRST CROP HIGH!

One of the important points in managing a crop of Carnations is to avoid cutting the first crop of flowers in the fall down hard. Obviously if the first crop is cut clear down to the base of the plant, there will be no place for breaks to come from to provide the all-important winter and spring production. This is the reason that most growers will turn up on the fall market with stems as short as 12 to 15 inches.

Professor W. D. Holley and Jorge Caparas at Colorado State University ran some interesting trials on the results of cutting back Carnations at three different heights. Briefly, the conclusion was that where the fall crop was cut high the production from January through April was much higher than where the fall crop was cut low. Interestingly enough, the best quality on the winter-spring crop was obtained where the fall crop was cut down fairly low. This quality difference was most noticeable in the fall and tended to disappear toward winter and spring.

Note the accompanying graph showing the production resulting from high, medium, and low cutting of the fall crop of flowers—on the trials at Colorado. Note particularly the substantially heavier production of flowers from early January till late April where the first flowers in the

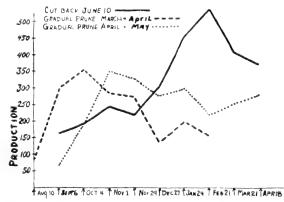
Incidentally, a high cut on the fall crop was defined here as cutting the flowers with a stem length from 14 to 18 inches. A medium cut meant cutting the flowers from 17 to 22 inches. Cutting a long stem in fall was defined as taking a flower with 22 to 26 inches of stem length,

#### GROWING CARNATIONS TWO YEARS

For years, some growers have practiced more or less of second year culture on their Carnations. It is still seen occasionally but could not be called a general practice at this time.

The big advantage, of course, is the saving in both labor of tearing out the crop, sterilizing and replanting, and also in the cost of the plants. This is substantial, and especially in a situation where help is scarce, the labor factor can become all-important.

# Distribution of 2nd Year Production-Carnations

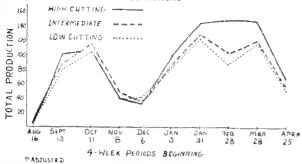


# 4-WEEK PERIOD BEGINNING

T-WEEN PERIOD BEGINNING

The question: should benches being prepared for second year production be pruned back early (March), or late (June). The gradual April-May pruning (thin dotted line) flowers less in the fall when flowers are not wanted and heavier in the winter when they are. The June 10 cut back (solid line) comes in very heavy December-February but very weak in late fall. Above graph by Prof. W. D. Holley, Colorado Growers Bulletin No. 65.

# The distribution of return crops from three heights of cutting Carnations



What happens if the fall crop of Carnations is cut down hard? Above chart by Prof. W. D. Holley, Colorado State University, puts the finger on the loss of production, especially during the all-important January-April period resulting from cutting the fall crop too low. The solid line above is the production curve from the plants which were cut high in the fall. See text. From Colorado Flower Growers Bulletin No. 59.

The principal disdavantage of second year culture are first, a decrease in quality on the second year crop; and second, some additional problems in timing of the crop where certain practices of cutting back are followed.

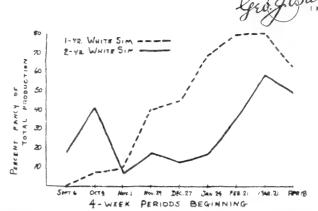
Again based on studies at Colorado State by Prof. W. D. Holley, it is apparent that the most important thing is to avoid cutting plants back all at one time. This not only gives a plant a severe check, but will result in a heavy follow-up crop during a limited period of time the following winter. A plan of gradual thinning and cutting back of the plants will distribute the second year production much better, and will result in improved quality, too.

According to tests run at Colorado, if the pruning is done during April and May, the following second year crop will occur later—steady and heavy in the winter and spring and lighter in the fall—than if the pruning is done in March and April. The graph shown on the preceding page illustrates this point very clearly.

The difference in quality between first and second year production on White Sim is also clearly shown on the graph above (right).

## EFFECT OF SUMMER COOLING ON CARNATIONS

Sufficient area of Carnations was grown under cooling the past summer over more or less of the country to draw at least tentative conclusions on the effect of cooling of the crop.



Percentage of fancy grade Carnations from one and two year White Sim plants. Clearly the first year plants produced more top quality blooms. The difference is most apparent between December and April. From Colorado Flower Growers Bulletin No. 65, W. D. Holley.

Nearly all of the Denver area Carnation crop is now under pad and fan cooling. Beyond question this has enabled the Denver growers to produce a good quality flower right through the summer months.

Second and even third year culture of Carnations looks a lot more promising as a result of cooling. Direct planting itself looks a lot better with the addition of greenhouse cooling. The biggest problem up to now has been the tendency of plants to die out when cuttings are planted directly into open benches in a boiling hot midsummer greenhouse.

#### Other Areas

Midwest (and East). Taking the Midwest as a typical area where a quantity of Carnations are grown and where humidity is higher than in Denver, we would appraise cooling about as follows: not as decisive an improvement in summer quality of cut flowers as is the case in Denver. However, in our experience here last summer, flowers were much larger than without cooling, and colors, particularly the pinks and yellows, were very noticeably better with cooling.

**South.** Cooling may mean more to southern growers than to any others. Good Carnations can be cut for five or six months in southern states, but without cooling the rest of the year is hopeless, and growers have not been able to make out. Cooling allows very good quality material to be produced the year around. This, combined with high winter light, has brought production up around 50 blooms per sq. ft. in some cases.

# TO PREVENT ROTTING OF CARNATIONS AFTER BENCHING

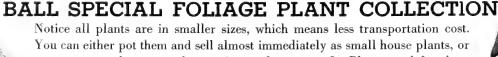
Loss of young Carnation plants after benching is more or less of a problem wherever Carnations are grown. Often it is difficult under commercial conditions to identify the specific disease involved (there are many)—and apply the specific control measures. However, there are certain general control measures which, if followed closely, will in most cases greatly minimize or completely eliminate this perplexing loss. Here they are:

- Thoroughly steam all soil, flats, labels, supporting stakes—anything that will come in contact with the soil or the plants. Soil can't be considered steamed unless it has been carefully checked (at the coolest points) with a thermometer. The rule: 180° for 30 minutes. Be sure to add all peat, manures, humus, etc., before steaming.
- Make every effort to obtain disease free cuttings. Much disease trouble comes into the bench with the cutting. The large specialist propagators who furnish the cuttings we offer conduct a constant program of culturing mother blocks, etc., to insure the greatest possible freedom from disease.
- 3. Where loss of plants has been a problem, we recommend potting cuttings to Jiffy-Pots or veneer bands rather than direct benching—or even planting to nursery beds. For whatever reasons, there is much less loss of plants, especially in Jiffies or sterile pots. Perhaps part of this is due to rapid drainage. Diseases are less apt to spread among plants in Jiffies or pots.

- 4. Very important: in setting cuttings into Jiffies or bands, be sure they are planted shallow—just as high in the soil as possible, even if a root or two shows. It is equally important in final benching of the plant to set the Jiffy-Pot or soil ball half an inch or so higher than the surrounding soil.
- 5. Ventilating and watering practices must be watched closely to keep stem and foliage dry as possible at all times. Avoid splashing water up onto the plants in watering—and also keep water from running across the bench. Water early in the day—with vents open. Misting of cuttings after planting can make trouble—better plant them earlier—before mid-May—so this is not necessary.
- Soils used should be in the medium levels of principal nutrients and in the medium low level of soluble salts. Calcium should be held at 150 ppm. A very hard soil should be loosened up with some peat—a bale or more to a bed.
- Fungicides can help too. A foliage spray every week or two during early stages with Captan or Parzate is beneficial. Terraclor applied to the soil dry after sterilizing and just before benching and raked in like a fertilizer is definite help against rhizoctonia and selerotium.
- Don't plant cuttings into bone dry soil—it should be medium moist.
- Try to avoid hot weather problems by getting cuttings in and potted during the cooler months of early spring—by early May or before.

# Foliage Plant Specials!

FOR THE SMALLER GROWER WHO CAN'T BUY IN LARGE QUANTITIES BUT WHO NEEDS A WIDE VARIETY OF HOUSE PLANTS TO SATISFY HIS CUSTOMER DEMAND



you can grow them on to larger sizes and more profit. Plants used for these collections are exactly the same grade and quality as used for our regular bulk orders. We reserve the right to make substitutions of equal or better

sizes and varieties in the event of shortages.



CHINESE EVERGREEN

<b>NEPHT</b>	HYTIS,
<b>GREEN</b>	GOLD



POTHOS WILCOXI

25 Chinese Evergreen, R.C., 3 to 5 in 3 to 6 leaves	25 Peperomia Obtusifolia, R.C 3 to 5 leaves
15 Dracaena Sanderiana, R.C 5 to 10 leaves	100 Philodendron Cordatum, R.C 3 to 5 leaves
25 Maranta Kerchoveana, R.C 3 to 7 leaves	25 Pilea Cadierei (Aluminum Plant),
25 Nephthytis Emerald Gem, R.C 3 to 5 leaves	R.C 4 to 8 leaves
25 Nephthytis Green Gold, R.C 3 to 5 leaves	25 Pothos Wilcoxi, R.C
25 Peperomia, variegated, R.C 3 to 5 leaves	25 Sansevieria Laurenti, 4 to 6 in 3 to 5 leaves

# SPECIAL FOLIAGE PLANT COLLECTION (340 plants) for \$28.75

Shipping wt. 18 lbs. approx. (Slightly heavier during winter).

# BALL 4-IN. PHILODENDRON COLLECTION (Large-Leaved)

Demand for these large-leaved Philodendrons is increasing fast—and with good reason! They respond well to ordinary living room conditions and are beautiful in either small or large sizes. Our collection contains plants of the four popular leaf types and varieties. Four-inch plants can be sold almost immediately or be grown on into larger sizes. Shipped in paper pots.

- 10 Pertusum. The most popular of the large-leaved kinds.
- 6 Hastatum. Excellent for totem poles. Enjoys shade and should not be overwatered.
- 4 Selloum. Leaves deeply cut, Self-heading—will not grow tall and lanky.
- 4 Panduraeforme. Requires moist, well drained soil and shade.

24 plants for \$20.35

# SPECIAL STANDING ORDER QUANTITY DISCOUNT!

Our special 5% discount from the above quoted prices applies on orders for 3 or more of the above collections-applies on orders for either collection or any combination of the two. To assure a continuing supply, why not order collections to be shipped at regular intervals throughout the season? Be sure to specify when shipments are to be made.

Above collections are shipped F.O.B. Florida and are available throughout the year.



P. PERTUSUM



P. PANDURAEFORME



P. HASTATUM



P. SELLOUM

## Ball Decorative Foliage Plants

F.O.B. FLORIDA

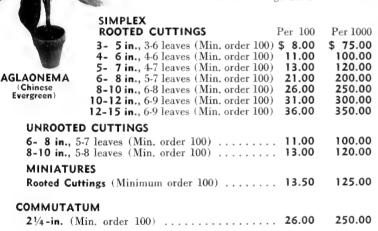
The sale of Foliage or "green" plants has risen phenomenally during the past 15 years. EVERYONE with an apartment or house buys them-not only once but several times a year. You can buy smaller-sized plants as listed below and either sell them for a quick-turnover crop or grow them on into larger sizes for increased profit. Many growers are buying larger sized plants for a "high ticket" quick-turnover crop.

BALL DECORATIVE FOLIAGE PLANTS are produced by leading Florida specialist growers. You will find our prices competitive and above all, our quality is unexcelled. If you are not one of our regular Foliage Plant customers, why not give us a trial order?

Write us for quantity prices.



Excellent plants for dry, dark locations. Widely used in smaller sizes for dish gardens.



#### REX BEGONIA

Five to seven varieties in each shipment. 21/4 inch. Packed in cartons of 50 only.

Prices: \$35.00 per 100; \$300.00 per 1000. 250 at 1000 rate.

Shipped via express F.O.B. Lockport, New York. 5% packing charge Nov. 1 to April 1 as insulated cartons are used. Growing suggestions sent on all orders.



REX BEGONIA

#### FIVE IMPORTANT POINTS TO REMEMBER IN GROWING FOLIAGE PLANTS

- 1. Soil mixtures should be heavily organic. For instance, a mixture of 1 part greenhouse soil, 1 part sand and 2 parts peat moss is good.
- 2. Regular feeding is important to keep plants growing and in good leaf color.
- 3. Temperatures should be a minimum of 65 to 70°, and higher than this for certain kinds.
- 4. High relative humidity is important.
- 5. Shade is important. Light shade during the northern winter months and heavy shade during summer.

#### DIEFFENBACHIA

Should be kept on the dry side. Temperatures between 55 and 68° are ideal. Grow in straight peat or a mixture of half peat and half soil. Should be shaded from direct sun. AMOENA. Large, oblong leaves with many long blotches of white and pale yellow.

DIEFFENBACHIA HOFFMANNI

Per 100 Per 1000 3 in. (Min. order 25) \$75.00 HOFFMANNI. Large ob-

long leaves with light blotches.

3 in. (Min. order 25) 75.00

PICTA. Green leaves blotched greenish white. Rooted Cuttings (Minimum order 50) ...... 30.00 21/4 in. (Minimum order 100) ..... 24.00 225.00

ROEHRSI. Yellowish green leaf, blotched ivory and edged green

3 in. (Minimum order 50) ...... 40.00

DRACAENA

#### DRACAENA

Temperatures between 65 and 80° are ideal. Provide some shade from direct sun.

GODSEFFIANA. Low growing plant with yellow dotted, glossy green leaves on

wiry stems. Per 100 Per 1000 Rooted Cuttings, 2-3

tiers. (Min. order 100) \$10.00 \$85.00

100) ...... 15.00 SANDERIANA MME. EUGENE ANDRE Rooted Cuttings (Min. order 100) ...... 20.00 SANDERIANA. Broad white bands bordering graygreen foliage.

21/4 in. (Min. order

Rooted cuttings, 5-10 leaves (Min. order 100) .... 15.00 21/4 in., 6-10 leaves (Min. order 100) ....... 20.00

Indivisa. The popular plant for planting in vases. Delivery September through March, F.O.B. Wisc., Ohio, and Mass. Minimum order 100 plants.

100.00 3 in. ..... 20.00 195.00

#### FERN

We offer a very complete list of fern plants, both in flats and from pots. Write us if you are interested in specific varieties. The following two varieties are our biggest sellers because of their use in Poinsettia pans. F.O.B. New Jersey. Plants are transplanted and shipped in 14x20 in. flats containing 150 to 170 plants per flat. Available June through September. We offer a special 5% discount for orders totaling 10 or more flats.

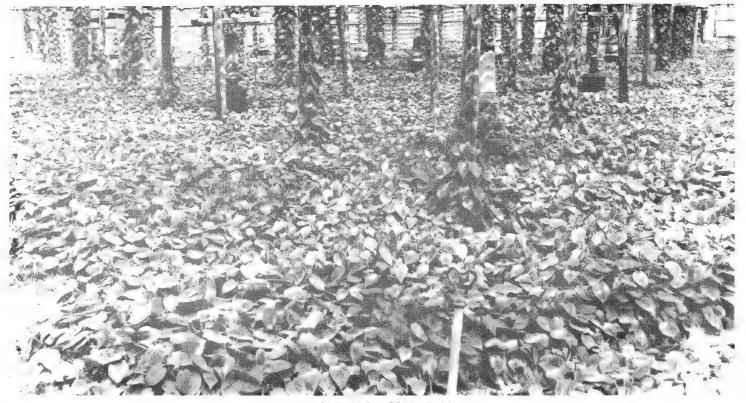
Pteris tremula. Robust, fast growing with feathered grass-green fronds. Best for larger Poinsettia pans. \$7.00 per flat.

Pteris Wilsonii. Compact habit with shapely crested fronds. Best for smaller Poinsettia pans. \$7.00 per flat.

#### **MARANTA**

KERCHOVEANA. Flat, oval leaves with chocolate blotches.

Per 100	Per 1000
Rooted Cuttings, 3-5 leaves (Min. order 100) \$ 8.00	\$75.00
21/4 in. (Min. order 100)	
21/4 in., 2 plants (Min. order 100) 20.00	



PHILODENDRON CORDATUM
Philodendron Cordatum stock plants in Florida. This is by far the most popular foliage plant being grown today.

<b>CORDATUM.</b> The most widely grown house			MICANS. Foliage oblong, variegated red and	
plant.	Per 100	Per 1000	green. Per 1	00 Per 1000
Rooted Cuttings, 2-3 leaves (Min, order 500) Rooted Cuttings, 3-5 leaves (Min, order 500)		\$ 40.00 55.00 150.00	Rooted Cuttings. (Min. order 100)       \$ 7.0         2½ in. (Min. order 100)       21.0	0 \$ 60.00
21/4 in., 3 per pot (Min. order 100)		160.00	PANDURAEFORME. A good climber with	
DUBIA. Deeply lobed leaves.			"fiddle-shaped" leaves.	
3 in. (Min. order 25) 4 in. (Min. order 25)			Rooted Cuttings.       3-5 leaves (Min. order 100)       20.0         3 in.,       2 plants (Min. order 100)       26.0         4 in.,       3 plants (Min. order 25)       50.0	0 250.00
HASTATUM. Large, arrow-shaped, leathery			, and the state 20/11.	
leaves.			PERTUSUM. Most widely grown large-	
<b>3 in.</b> (Min. order 25)			leaved Philodendron. Excellent for totem pole work.	
HASTATUM X IMBE			3 in. (Min. order 25) 50.0	0
<b>3 in.</b> (Min. order 25)	50.00		4 in. (Min. order 25)	0
IMBE			<b>SELLOUM.</b> Self-heading with large, deeply	
<b>3 in.</b> (Min. order 25)	50.00		cut leaves.	
<b>4 in.</b> (Min. order 25)	75.00		<b>3 in.</b> (Min. order 25) <b>50.0</b>	0



DUBIA









IMBE

PANDURAEFORME

# Ball Decorative Foliage Plants

150.00

150.00

#### **NEANTHA BELLA PALM**

	0 1	r 100	Per 1000
Seedlings.	delivery.		
			\$ 35.00

Transplants. 4-5 leaves, 6-8 in. Fall delivery. Minimum order 250 . . . . . .

NEPHTHYTIS.

GREEN GOLD

21/4 in., 2 plants. Minimum order 100 .... 17.00 160.00



**NEANTHA** BELLA PALM

#### **POTHOS**

Beautifully colored leaves make the Pothos a wonderful plant for small arrangements and dish gardens.

Per 100 Per 1000

MARBLE OUEEN.

Green leaves variegated snowy white.

Rooted Cuttings, 3-5 leaves. Minimum

order 100 .....\$11.00 \$100.00

 $2\frac{1}{4}$  in., 2 per pot. Minimum order 100, 21,00

WILCOXI. Green leaves, variegated with yellow.

Rooted Cuttings. 3-5 leaves. Minimum order 100 ..... 60.00  $2\frac{1}{4}$  in., one per pot. 100.00 Minimum order 100, 11.00

21/4 in., two per pot. Minimum order 100. 17.00 160.00

MARBLE QUEEN

POTHOS WILCOXI

Per 100 Per 1000

70.00

70.00

#### NEPHTHYTIS

Per 100 Per 1000 EMERALD GEM. Green crinkled leaf.

50.00

Rooted Cuttings, 3-5 leaves. Minimum order 100 . . . . . . . . . . . . \$ 7.00 \$ 60.00

 $2\frac{1}{2}$  in., 2 per pot. Minimum order 100. 16.00 GREEN GOLD. Leaves show whitish centers.

Rooted Cuttings. 3-5 leaves. Minimum order 100 ...... 7.00 60.00

IMPERIAL WHITE. Wider leaved and lighter in color

 $2\frac{1}{2}$  in., 2 per pot. Minimum order  $100 \dots 16.00$ 

than Green Gold. Rooted Cuttings. 3-5 leaves. Minimum order 100. 11.00 100.00

#### SANSEVIERIA

200.00

About our most indestructible house plant, Withstands varying temperatures and dark corners.

LAURENTI. Dark green leaves with light green cross bands and broad yellow margin.

8-12 in. 3 leaves up. Minimum order 100 . . .

12-15 in. 3 leaves up. Minimum order 100 . . .

4- 6	in. 3 leaves up.	Minimum or	der 100	. \$13.50	\$125.00
6- 8	in. 3 leaves up.	Minimum or	der 100	. 13.50	125.00
8-12	in. 3 leaves up.	Minimum or	der 100	. 13.50	125.00
12-15	in. 3 leaves up.	Minimum or	der 100	. 14.00	130.00
15-18	in. 3 leaves up.	Minimum or	der 100	. 14.00	130.00
18-24	in. 3 leaves up.	Minimum or	der 100	. 14.00	130.00
ZEYLANI gins.	CA. Same as La	nurenti but no	yellow mar	٠-	
4- 6	in. 3 leaves up.	Minimum or	der 100	8.00	70.00
6- 8	in. 3 leaves un.	Minimum or	der 100	8.00	70.00

#### PEPEROMIA

Per 100 Per 1000 EMERALD RIPPLE. Rippled green foliage with small upright flower stalks

Rooted Cuttings. Minimum order 100 ....\$ 7.00 \$ 60.00 21/4 in. Minimum order 100 . . . . . . . . . . . . 15.00

OBTUSIFOLIA. Leathery, shiny green leaves.

Rooted Cuttings. 3-5 leaves. Minimum order 100 ...... 60.00 21/4 in. 5-8 leaves. Minimum order 100 .... 11.00 100.00

PILEA CADIERI

(Aluminum Plant)

mum order 100 ...\$ 6.00 \$ 50.00

Per 100 Per 1000

VARIEGATA. Green leaves heavily variegated creamy vellow.

Rooted Cuttings, 3-5 leaves, Minimum order 100, 11.00 100 00 160.00 21/4 in., 5-8 leaves. Minimum order 100 . . . . . 17.00

Rooted Cuttings. Mini-

**DWARF** Rooted Cut-

tings.

in. Minimum order 100 ..... 16.00

Minimum

order 100 ..... 12.00

#### SCHEFFLERA

Large compound leaves with 6 to 9 leaflets. Well suited to dish garden work in smaller sizes and also good in large specimens. Plant in well drained soil and do not overwater. Temperatures of 65° or over and protection from direct sun are necessary.

Per 100 Per 1000 Seedlings, bare root, 6-8 in. Available midwinter. Minimum order 100 . . \$ 7.50 2½ in. Minimum order



8.00

**SCHEFFLERA** 

#### SPATHYPHYLLUM

Oblong leaves, dark green above and lighter green below.

Per Per **CLEVELANDI** 1000 Rooted Cuttings. 3-4 leaves. Minimum order 100 .. \$8.00 \$60.00

### VINCA VINES

(Variegated)

t t di logato di	
Per 100	Per 1000
21/4 in. Minimum order 100 plants. Available	
November to March	\$100.00
Rooted Cuttings. Available October to February. Min-	
imum order 250 5.00	
Vinca Vines F.O.B. Ill., Ind., and Mass. 500 or more priced at	1000 rate.



PEPEROMIA.

EMERALD RIPPLE

PILEA CADIERI

150.00

100.00



PINK CLOUD GERANIUM

An exceptionally large flowered pleasing light pink. Similar but superior to Enchantress Fiat because of its vigorous, free flowering growth during the heat of midsummer.

# Ball Geraniums

These cuttings come from California growers and are available throughout the year. When ordering, be sure to specify whether you want ROOT-ED or UNROOTED cuttings.

	PI	(EMI	UM VAKILI	152		
	Dark Red Irene		*Pink Clou	d	*Pink Fiat	
	* Enchantress	Fiat	Fancy	Leaf	Assorted	
ces	above 5 varieties:				Per 100	1

 Prices above 5 varieties:
 Per 100
 Per 1000

 Unrooted Cuttings
 \$4.75
 \$42.50

 Rooted Cuttings
 8.75
 \$2.50

 \*Limited Supply

Appleblossom Irvington Beauty Radio Red Mme. Buchner Mme. Landry Avalon Beauty Red Fiat Avalon Red **Red Landry Better Times** Olympic Red Salmon Irene Gregerson's White Penny Pride of Camden Imp. Red Fiat Salmon Supreme Imp. Ricard Ivy Leaf Assortment Snowball Irene Poitevine

 Prices above 22 varieties:
 Per 100
 Per 1000

 Unrooted Cuttings
 \$4.50
 \$40.00

 Rooted Cuttings
 8.50
 80.00

MINIMUM ORDER, 1500 CUTTINGS, 100 of a variety. 250 or more cuttings of any variety billed at the 1000 price. Because of the highly perishable nature of Geranium cuttings, we ship by AIR FREIGHT ONLY, 3000 cuttings can be shipped at minimum air freight rates. All cuttings shipped f.o.b. California. Be sure to specify on your order the airport to which cuttings are to be sent and your telephone number where air freight companies can call you upon arrival of the shipment.

Orders for Rooted Cuttings are rooted to order only—allow 6 weeks for delivery. Be sure to specify on your order whether you want ROOTED or UNROOTED cuttings.

#### 21/4-INCH PLANTS

The following varieties are grown for us by specialists. Available July through May.

#### PREMIUM VARIETIES

Pink Cloud Enchantress Fiat Salmon Irene Springtime. Light salmon. Dark Red Irene
Prices above 5, each: \$17.00 per 100; \$160.00 per 1000.

Appleblossom Better Times Genie (rose-pink) Imp. Ricard

Mme. Buchner

Mme. Landry Olympic Red Penny (neon-pink) Picardy Pink Fiat Poitevine Radio Red Red Fiat Salmon Supreme

Snowball

Prices above 16 varieties: \$16.00 per 100; \$150.00 per 1000.

Minimum order, 100 plants. Shipped f.o.b. Illinois, Connecticut, Colorado, Michigan, New York, Ohio, Texas, New Jersey, Virginia, Pennsylvania and Wisconsin where available. Your order will be shipped from nearest available source.

# Begonias

#### DOUBLE FLOWERED BEGONIAS

Available February through June. F. O. B. Texas.

Here is a new selection in double Begonias. We have selected, after thorough trialing, the seven most satisfactory double varieties from various sources throughout the U. S. Our grower is building stock now and we offer them in a collection and separately, as well, all grown and shipped in Jiffy-Pots.

The collection consists of 5 varieties, ALL DOUBLES, 2 pink, 2 red and 1 white. All varieties will be named and labeled. Grower will select the varieties from the seven listed below:

Double Carmen. Pink, bronze leaf. Fire Fly. Deep red, bronze leaf. Snowdrop. White, bronze leaf. Red Camellia. Rose-red, bronze leaf.

Pink Camellia. Pink, bronze leaf. Robin Hood. Salmon-pink, bronze leaf. Pink Beauty. Medium pink, sport of Carmen; green leaf.

In 21/4-inch Jiffy-Pots

COLLECTION of 100 plants-\$25.00

Double Begonias can be ordered in separate varieties—Minimum per variety, 50.

Minimum order 100.

PRICE: \$25.00 per 100; \$225.00 per 1000.

250 plants shipped at the 1000 rate.

Plants are Jiffy-Potted and packed in individual containers to insure safe arrival.





#### SPECIAL COLLECTION of the Best Varieties of Indicas and Kurumes

Shipped RAILWAY EXPRESS PREPAID from CALIFORNIA to any CITY in the UNITED STATES

With these collections you can have a blooming plant to sell any time from Christmas on to Easter. Merely indicate when you want to have them bloom and they will be shipped at the proper time.

Why not order a case of each size for every holiday in 1960? They'll pay.

#### SPECIAL NOTE!

It happened! This offer proved so popular that it was sold out before our catalog was printed. Place your order now to assure delivery of this outstanding offer next fall (1959) and spring (1960).

\_\_\_\_\_\_\_

*4-inch Pot Collection (45 4- to 5-inch head)		
6-inch Pot Collection (24 8- to 10 inch head)	plants)	(Approx.
SOLD BY POT SIZE ONLY-		

Available October to March. \*We do not recommend 4-inch Collection for Christmas

blooming.

PRICES ABOVE ARE TOTAL DELIVERED COST Azaleas when shipped are well budded.



Mrs. Arvilla Kerst (Plant Department Mgr.) displaying a typical Azalea Collection on arrival from California. These top quality plants are neatly packed, ready for forcing.

#### FIBROUS ROOTED BEGONIAS

#### 2-Inch Banded Plants **DWARF CLASS**

Adeline Red Pearl Ball Deep Rose Pink Pearl Luminosa Compacta

#### INTERMEDIATE CLASS

Carmen Scandinavia Red Indian Maid Scandinavia White Scandinavia Pink

Assortment of above varieties in both the Dwarf and Intermediate class.

For complete descriptions of above listed varieties, see page 10.

Prices on above: \$12.00 per 100; \$100.00 per 1000. 250 supplied at the 1000 rate. Shipped in units of 50 plants in our Ball-Pak. Minimum order, 100; 25 of any one variety. Order in multiplies of 50. Available September to June. F. O. B. Ohio.

#### DOUBLE VARIETIES

Geneva Scarlet Geneva White Westport Beauty. Pink.

Prices on above: 21/4-inch plants shipped F.O.B. Ohio, \$25.00 per 100. Minimum order, 50 plants per variety. Available fall through June.

#### SCANDINAVIAN BEGONIAS

(Norwegian)

For Christmas flowering buy 21/4-inch in June. For October 15 flowering, buy 21/4-inch in April or May, shift to flowering size pots by July 15; black cloth shade between 5 PM and 7AM beginning August 15 until buds are well set. For April 1 flowering, buy 21/4-inch in September and light October 1 to February 1 with 100 watt bulbs placed 3½ feet above plants and 5 feet apart in suitable reflectors. A 55° night temperature is recommended for forcing.

Tove. Medium pink, large flowers and leaves. Early.

Spirit of Norway Karolina Solbachen Skavane

Above varieties are very similar. Color deeper than Tove. Foliage smaller and growth more compact. Flowers normally for Christmas

Red Solfheim Dark Marina

Excellent dark pink (almost red) varieties. Compact growers.

Dark Solbachen. Dark pink flowers, dark green foliage. Smaller and more compact grower than others. Slower grower but flowers for Christmas. Compacta.

Prices on above varieties: \$47.50 per 100; \$425.00 per 1000.

#### SCANDIA COLLECTION

50 plants, or multiplies of 50 consisting of some of each of the Scandinavian varieties. \$52.50 per 100; \$475.00 per 1000. Packed in cartons of 50 plants each—order accordingly. 250 plants at 1000 rate. Shipped express F.O.B. New York. Available April 15 to August 1.

#### MELIOR (Christmas) BEGONIAS

Culture same as outlined above for Scandinavian varieties except forcing temperature should be 60.

Marjorie Gibbs Lady Mac Melior Prices on above: 21/4-inch plants, \$42.50 per 100: \$375.00 per 1000.

Lady Mac Supreme (P.A.F.) A sport of Lady Mac. Rich glowing deep pink with red flower stems. Leaf distinctively veined; deep green with red-bronze edges. Very compact. Superior for January sales. Prices 21/4-inch plants: \$30.00 per 50; \$55.00 per 100; \$500.00 per 1000. 250 plants at the 1000 rate. Varieties (except Lady Mac Supreme) may be grouped for quantity price.

Minimum order 50 plants per variety. Order in multpiles of 50 plants per variety. Shipped F.O.B. New York



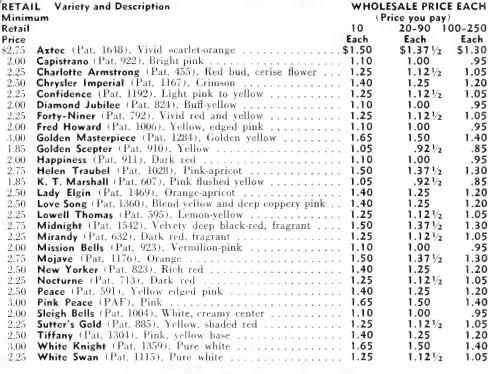
## Ball

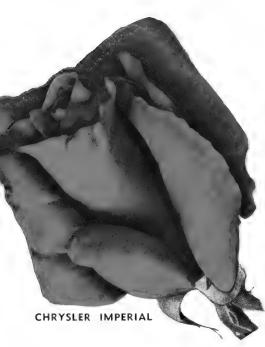
# Garden

Roses

## California Grown Exclusively for Geo. J. Ball F.O.B. West Chicago

#### PATENT HYBRID TEAS





OLDEN MASTERPIECE





# Ball Garden Roses

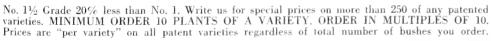
## WHICH GRADE OF ROSES SHOULD YOU BUY!

BALL GARDEN ROSES are graded according to standards established by the American Association of Nurserymen. This grading system assures you of quality bushes!

No. 1 grade Roses are the heaviest bushes, therefore will produce the largest plants in the garden. No.  $1\frac{1}{2}$  grade bushes are in no sense culls or any the less salable plants.

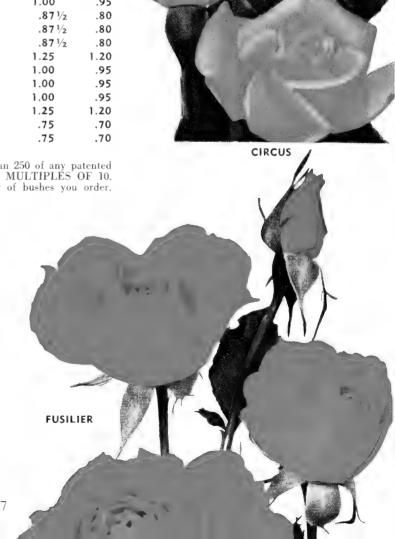
#### PATENT FLORIBUNDAS

RETA Minim Retail Price	num	10 Each	OLESALE PRIC (Price you pay 20-90 Each	
\$2.00	Baby Blaze (Pat. 1362). Velvety cherry-red		\$1.00	\$0.95
2.25	China Doll (Pat. 678). Deep pink. Low growing	1.25	$1.12\frac{1}{2}$	1.05
2.50	Circus (Pat. 1382). Bicolor red and yellow	1.40	1.25	1.20
2.00	Fashion (Pat. 789). Coral-pink		1.00	.95
2.50	Fusilier (P.R.R.). Orange-red		1.25	1.20
2.50	Gold Cup (P.R.R.). Bright yellow	1.40	1.25	1.20
1.75	Goldilocks (Pat. 672). Yellow	1.00	.87 1/2	.80
1.75	Independence (Pat. 1036). Spectrum-red	1.00	.87 1/2	.80
2.75	*Ivory Fashion (AARS). (Pat. 1688), Ivory	1.50	1.37 1/2	1.30
2.00	Jiminy Cricket (Pat. 1346). Coral-orange	1.10	1.00	.95
2.00	Ma Perkins (Pat. 1143). Coral-shell-pink	1.10	1.00	.95
1.75	Pink Bountiful (Pat. 601). Deep rose-pink	1.00	.87 1/2	.80
2.00	Pinkie (Pat. 712). Pink	1.10	1.00	.95
1.75	Pinocchio (Pat. 484). Rich salmon	1.00	.87 1/2	.80
1.75	Red Pinocchio (Pat. 812). Carmine	1.00	.87 1/2	.80
1.75	Siren (Pat. 1197). Vivid red	1.00	.87 1/2	.80
2.50	Spartan (Pat. 1357). Reddish coral	1.40	1.25	1.20
2.00	Sumatra (Pat. 1572). Red	1.10	1.00	.95
2.00	Valentine (Pat. 1029). Bright red	1.10	1.00	.95
2.00	Vogue (Pat. 926). Cherry-coral	1.10	1.00	.95
2.50	White Bouquet (Pat. 1415). New. White	1.40	1.25	1.20
1.50	White Pinocchio (Pat. 1010). White	.90	.75	.70
1.50	Yellow Pinocchio (Pat. 992), Yellow	.90	.75	.70









FASHION



STARFIRE (1959 AARS)

# Ball Garden Roses

#### PATENT GRANDIFLORAS

RETAIL Variety and Description	WHOL	ESALE PRIC	CE EACH
Minimum	( [	Price you pa	<b>y</b> )
Retail	10	20-90	100-250
Price	Each	Each	Each
\$2.50 Buccaneer (Pat. 1119). Sunshine-yellow	 . \$1.40	\$1.25	\$1.20
2.00 Carrousel (Pat. 1066). Deep rich red	 . 1.10	1.00	.95
2.75 Montezuma (Pat. 1383). Scarlet-orange	 . 1.50	1.37 1/2	1.30
2.50 Queen Elizabeth (Pat. 1259). Delicate clear pink	 . 1.40	1.25	1.20
2.50 Roundelay (Pat. 1280). Vivid glowing red	 . 1.40	1.25	1.20
3.50 *Starfire (PAF). (AARS). Red		1.75	1.55

No. 1½ grade 20% less than No. 1. Write us for special prices on more than 250 of any patented varieties. MINIMUM ORDER 10 PLANTS OF A VARIETY, ORDER IN MULTIPLES OF 10. Prices are "per variety" on all patent varieties regardless of total number of bushes you order.

#### PATENT CLIMBERS

RETAIL Minimu	Variety and Description		ESALE PRIC	
Retail		10	20-90	100-250
Price		Each	Each	Each
\$2.50 C	Cl. Aloha (Pat, 948). Coral-pink	\$1.40	\$1.25	\$1.20
2.75 <b>C</b>	Cl. Chrysler Imperial (Pat. 1528). Flaming red	1.50	1.37 1/2	1.30
2.50 C	Cl. Crimson Glory (Pat. 736). Deep red	1.40	1.25	1.20
2.75 <b>C</b>	Cl. Golden Showers (Pat. 1557). New yellow Climber	1.50	1.37 1/2	1.30
2.00 C	Cl. King Midas (Pat. 586). Yellow	. 1.10	1.00	.95
2.25 <b>C</b>	Cl. Peace (Pat. 932). Yellow, edged pink	. 1.25	$1.12\frac{1}{2}$	1.05

No. 1½ grade 20% less than No. 1. Write us for special prices on more than 250 of any patented varieties. MINIMUM ORDER 10 PLANTS OF A VARIETY. ORDER IN MULTIPLES OF 10. Prices are "per variety" on all patent varieties regardless of total number of bushes you order.

#### STANDARD HYBRID TEAS

2/		8 1		_	840	
т	r		1	u	w	

Eclipse
Golden Dawn
Joanna Hill
McGredy's Yellow
Mrs. E. P. Thom
Mrs. P. S. DuPont
Soeur Therese

Ami Quinard Better Times Christopher Stone Crimson Glory

Etoile De Hollande

#### PINK

Editor McFarland Margaret McGredy Peters Briarcliff Picture Pink Dawn Pink Radiance The Doctor

#### RED

McGredy's Scarlet Red Pres. Hoover Red Radiance Poinsettia

**Betty Prior** 

Rosenelfe

Cecile Brunner

#### BICOLOR

Autumn Condesa De Sastago Countess Vandal Pres. Hoover Talisman

#### WHITE

Frau Karl Druschki K. A. Victoria McGredy's Ivory

#### STANDARD FLORIBUNDAS

#### RED

Eutin Floradora Imp. Lafayette Red Ripples World's Fair

#### PINK

1

WHITE

Dagmar Spaeth Summer Snow

#### STANDARD CLIMBERS

RED

Cl. Paul's Scarlet

#### YELLOW

PINK

Cl. Blaze Cl. Etoile De Hollande Cl. Gold Rush Cl. Yellow Talisman Cl. New Dawn Cl. Pink Radiance

Cl. Snowbird

BICOLOR

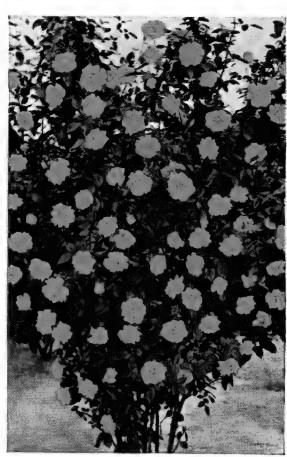
WHITE

Cl. Pres. Hoover Cl. Talisman

### PRICES STANDARD VARIETIES

No. 1 Grade         \$6.50           No. 1½ Grade         5.25	\$60.00	
All Rose bushes sold in units of 10 plants of a variety and	anada an multir	.11.

All Rose bushes sold in units of 10 plants of a variety and grade or multiples of 10. Standard varieties may be grouped for quantity rate.



CL. GOLDEN SHOWERS

#### IMPORTANT!

Prices quoted at left are F.O.B. West Chicago, or F.O.B. Baltimore, New Jersey or Pittsburgh if your order totals 100 or 250 plants or multiples thereof (our standard packing case sizes) and if your order is received by us before November 10.

# Ball Foreing Pot Roses

Gro.g. Ball

Our Roses for pot forcing are budded to our order by a West Coast specialist. As a result of years of experience, we are confident that no finer plants are available at any price. We earnestly suggest placing your order with us EARLY so we can furnish you the varieties and grades you need. Our pot forcing Roses are budded for us 2 years in advance. When

our crop of a variety is booked up, we are sold out for the season. All orders accepted in the order of their receipt. Shipment December through February. We recommend XXX grade plants for large specimen plants and XX grade for medium sized plants. Varieties we particularly recommend are starred (\*).

#### PATENT VARIETIES

THUNDERBIRD (PAF). Brilliant, velvety scarlet sport of Garnette. SKYLARK (PAF). Beautiful clear pink sport of Carol Amling. Carol Amling (Pat. 1126). A light coral-pink sport of Garnette. Excellent.

Crimson Rosette (Pat. 901). Irene of Denmark (Pat. 889). White.

Prices on each of above patented varieties:

#### XXX GRADE

10 plants, \$1.00 each; 20-90 plants, 87 1/2 c each; 100-250 plants, 80c each; more than 250 plants, 75c each.

Minimum order 10 of a variety.

#### XX GRADE

10 plants, **80c** each; 20-90 plants, **70c** each; 100-250 plants, **64c** each; more than 250 plants, **60c** each.

Minimum order 10 of a variety. Prices on patented varieties are per variety. Patented varieties cannot be grouped with standards for quantity prices.

#### OUR SPECIAL POT FORCING ROSE COLLECTION-

All XXX Grade Plants

40 Triumphe D'Orleans

10 Margo Koster

20 Garnette 10 Dick Koster 10 Magna Charta

10 Bright Pink Garnette

\$63.00 including packing charge.

Orders for case lots or more including our special pot Rose forcing collection received by us before November 1 may be shipped f.o.b. West Chicago, New Jersey, Pittsburgh, or Minnesota. All other orders shipped f.o.b. West Chicago. Minimum order, 10 plants of a variety.

#### STANDARD VARIETIES

Bonfire (Climber). Scarlet, Used for particularly large specimen plants for training into "basket" shapes, large circles, etc.

Bright Pink Garnette. A bright, deep pink sport of Garnette. Large flowered.

Dick Koster. Bright salmon-rose.

Garnette. This popular Floribunda cut-flower variety is excellent for pot forcing. Attractive bronzy green foliage and rich red flowers.

Gioria Mundi. Salmon.

Magna Charta. Bright pink.

Margo Koster. The popular salmon-orange with globular shaped flowers.

Mothersday. A red sport of Margo Koster. Excellent for Easter and later.

Triumphe D'Orleans. Carmine or cherry-red.

Prices on above standard varieties:

XXX GRADE: 69c each or 55c each for orders totaling 1,000 or more. Minimum order 10 of a variety.

XX GRADE: 59c each or 45c each for orders totaling 1,000 or more. Minimum order 10 of a variety.

#### SPECIAL CASE PRICE ON STANDARD VARIETIES ONLY:

Case of	100	plants,	XXX	grade										 . \$	60.50
Case of	200	plants,	XXX	grade									,		121.00
Case of	160	plants,	XX	grade		٠									72.50

All standard varieties may be grouped to take advantage of lowest quantity price. Packing on Pot Forcing Roses charged at cost.



**CINDERELLA** 

#### TRY MINIATURE ROSES

The following varieties are excellent for border work. All are very hardy. Those best adapted for pot forcing are starred (\*); may be flowered in 6 weeks in a 60° night temperature. These are furnished as "own root" 3-inch plants in a dormant condition. Delivery f.o.b. Pennsylvania either spring or fall.

Minimum order, 50 plants, 10 plants of a variety. Cultural instructions with each order.

Minim	num		HOLESALE P Price you pa	<b>y</b> )
Retail Price		10-99 Each	100-249 Each	250-up Each
\$1.25 1.25	Baby Gold Star (Pat. 407), Golden yellow. To 14 in. high *Cinderella (Pat. 1051). Cream-white sometimes tinged cameo-pink, Double, Extra fine Hybrid Tea form, Thornless		\$0.57 1/2	\$0.50
1.95	and grows to 10 in. high	.62 1/2	.57 1/2	.50
1.25	ture. Almost thornless. To 9 in. high	.62 1/2	.57 1/2	.50
	*Pixie (Pat. 408). The smallest double white Rose. Shows pink shading in cool weather. To 8 in. high	.62 1/2	.57 1/2	.50
1.25	*Red Imp (Pat. 1032). Deep, rich crimson. Very double, almost star-shaped flowers. To 10 in. high	.62 1/2	.57 1/2	.50
1.50	very free blooming. To 10 in. high	.75	.70	.60
1.25	*Sweet Fairy (Pat. 748). Pink buds open to double, 1-inch flowers of apple-blossom-pink, Fragrant. To 10 in. high	.62 1/2	.57 1/2	.50
1.25	long lasting blooms. Very hardy. To 8 in. high	.62 1/2	.57 1/2	.50
1.25	Tom Thumb (Pat. 169). Crimson buds lighten as blooms open into well formed, perfect, tiny Roses. To 9 in. high.	.62 1/2	.57 1/2	.50
1.25	Bo-Peep (Pat. 976)	.621/2	.57 1/2	.50

#### BIRD PERENNIAL POTS



Garden Roses already started in pots bring premium prices and satisfied customers.

The Perennial Pot is ideal for this purpose —made of a tough, durable material with a hard, smooth coating inside and out—solid stapled bottom with openings for drainage. Height,  $9\frac{1}{2}$  in. Top diameter, 7 in.

PRICES		
Wt. per	Per Case	Per
1000	of 200	1000
355 lbs	\$14.50	\$69.00
M:	.d of 200 Th	

Minimum order, case of 200. Three cases at 1000 price. Prices net, F.O.B. our West Chicago warehouse or factory near Boston.



Our sales force "sits" for its official family photograph. They were all on hand to help in greeting our 2500 Field Day guests.
FRONT ROW: Johnny Naydo, So. Calif.-Ariz.; Jim Lonsway, Canada; Winn Ivey, Canada; Roy Nicholson, Canada; Bob Whitman, Ia.-Minn.-No. and So. Dak.;
Ben Luther, Wisc.; Bob Shoenhair, III.; Darrell Messick, Tex., Okla. and Colo.; Bill Fisher, Ark., La., and Miss.; Frank Drab, No. New Jersey.
STANDING: Bob Chase, Ala., Georgia, Cent. and E. Tenn.; Vern Potteiger, Mo., Nebr. and Kans.; Bud Dunn, Ind.-Ky.; Hank Van Wyngarden, Oreg.-Wash.;
Jack McCluskie, Florida; John Kyne, No. Calif.-Utah; Bill Franklin, Md.-Del., Cent. Penna:, Harold Innis, E. Ohio-W. Va.-W. Penna:, Jack Stinson, Upstate
N. Y.; Rocky Calamia, Conn.-R.I.-L.I.; Charlie Crownover, Phil. Area and So. N. J.; Skip Rittenhouse, W. and Cent. Ohio; Blaine Stuhlsatz, Chicago Area;
Kenn Tufts, Mass.; Ray Benston, Va.-N and S. Carolina; Si Randolph, Mich.; Don Carey, Sales Mgr.; Jim Tufts, New England; Vic Ball; Geo. K. Ball; Carl Ball.

## Miscellaneous Plants

#### **AGERATUM**

Available September to March. Shipped F.O.B. Illinois, Indiana, Ohio, Pennsylvania, and Massachusetts.

	Per 100	Per 1000		
Blue Boy	. \$3.00	\$26.00		
Devon Blue. Bushy, slightly taller than Imp. Riversic	le <b>3.50</b>	30.00		
Imp. Riverside. Dwarf blue	. 3.00	26.00		
New Masterpiece. Blue	. 3.00	26.00		
New Pink. Dwarf	. 3.50	30.00		
Purple Beauty. Tall	. 3.00	26.00		
White. Dwarf	. 3.50	30.00		

21/4-inch plants of the above varieties: \$10.00 per 100; \$90.00 per 1000; 500 plants at 1000 rate. Minimum order 250, 100 of a variety.

#### **AZALEAS**

See page 75 and write for further lists.

#### BEGONIAS

See pages 74-75.

#### BLEEDING HEART

(Dicentra Spectabilis)

Field-grown clumps F.O.B. Pennsylvania October 15 to April 1. Minimum order 25 clumps. 3-5 eyes, 40c each; 5-8 eyes, 50c each.

#### **BOXWOOD** (Buxus japonica)

				Per 100	Per 1000
Rooted	Cuttings.	F.O.B.	California	\$ 7.00	\$65.00

#### CALCEOLARIA

#### SPECIAL CALCEOLARIA ASSORTMENT

For the retail grower who wants a collection of all the principal colors available in both the cutting and seedling Calceolarias. All 2¼'s: 50 plants of the Mother's Day cutting varieties and 50 plants of the seedling varieties. Available Sept. to Dec. Shipped F.O.B. New York: Assortment (100 2¼-inch plants) \$20.00.



Calceolaria

We suggest potting either cuttings or  $2\frac{1}{4}$ 's directly to 5-inch pots. Keep plants on dry side and give cheesecloth shade during spring and summer. Temperature 48 to  $50^{\circ}$ . All plants shipped F.O.B. New York,  $2\frac{1}{4}$ 's available Sept. to Dec. Minimum order 100.

#### VARIETIES GROWN FROM SEED for EASTER FLOWERING:

21/4-inch plants \$20.00 per 100.

Multiflora Nana. Excellent strain. Multiflora Nana, Gilbert's Strain. Triumph. Shades of yellow, orange and red. Mixture of seedling varieties (not labeled), \$18.00 per 100.

## VARIETIES FROM CUTTINGS for MOTHER'S DAY FLOWERING: $2\frac{1}{4}$ -inch plants \$30.00 per 100.

Greater New York.
Pure Flame. Red.
Stewart II. Yellow.

Imp. Perfection. Yellow, orange. Golden Talisman. Amber.

Cherry Queen. Pink. Mary Louise. Red. Pink Perfection. Pink. Rosacker's Brilliant. Red. Suzanne. Yellow.

#### CACTI AND SUCCULENTS COLEUS

Per 100  All-Purpose Superior. 15 or more varieties. Minimum order, 100 plants. F.O.B. California		Butterfly Gold Bound Brilliancy Hollywood Red Christmas Gem Golden Bedder
Small Foliage Plant Assortment. Consists mostly of Billbergias, Variegated Ivy, Philodendron, Peperomia,		Rooted Cuttings of above 6 varieties, each: \$4.50 per 100; \$40.00 per 1000. F.O.B. Indiana.
Boxwood, Cryptanthus, Euonymus, etc. Minimum order, 100 plants. F.O.B. California	87.50	Assorted Bright Colors. Rooted Cuttings, \$4.00 per 100; \$35.00 per 1000. F.O.B. Ill., Ind., Penn., Ohio, and Mass.
order 100 plants	95.00	Minimum order 100, 500 or more at 1000 rate.

#### CARNATIONS

See pages 64-69.

#### **FOLIAGE PLANTS**

See pages 70-73.

#### **FUCHSIA**

		-		
P	Roote er 100	d Cuttings Per 1000	2½- Per 100	in. Plants Per 1000
Little Beauty. Double. Red petals with purple bell. Dwarf	\$8.00	\$78.50	\$14.00	\$135.00
Hollydale. Double. Rose petal with		65.00	,	
winder bell	7.00	65.00	13.00	125.00
petal with violet bell	7.00	65.00	13.00	125.00
Bagdad. Double		62.50	12.50	120.00
Lord Byron. Double dwarf red		62.50		
Black Prince. Tall pink	6.75	62.50	12.50	120.00
Pride of Orion. Tall double red				
with white bell		62.50	12.50	120.00
Giant Pink. Double tall pink	6.75	62.50	12.50	120.00
500 of above cuttings or 21/4-inch pl	ants bi	lled at the	1000 rate.	Minimum
rooted cutting order 250; 21/4-inc Indiana and Mass.	h, 100	. Shipped	F.O.B. Per	ınsylvania,

#### **GERANIUMS**

See page 74.

#### **GLOXINIAS**

#### Grow Gloxinias from Ball Seedlings!

Modern seedling strains of Gloxinias are fast gaining favor as a quick pot plant crop. The newer seedling varieties feature brilliant colors and small, leathery leaves that stand packing and shipping well. A few cultural pointers:

- 1. Pot seedlings immediately upon arrival directly into 5- or 6-inch pots.
- 2. Use a sterilized mixture of ½ peat moss or leaf mold and ½ sandy
- 3. Water frequently and lightly. Never allow to completely dry out. Never wet foliage. Keep atmospheric humidity high.
- 4. Temperatures of 64 to 68° are ideal the year round.
- 5. Shade with cheese cloth during bright summer days.
- 6. Feed with a weak solution of ammonium sulfate twice a month,

BALL GLOXINIA SEEDLINGS WILL FLOWER IN 3 to 4 MONTHS FROM PLANTING. THEY CAN BE GROWN THE YEAR ROUND. TRY THEM!

#### SPECIAL FORMULA MIXTURE

Made up specially for the smaller grower who needs a hundred or more Gloxinias and doesn't want to bother ordering by individual varieties. This mixture consists of nearly ½ solid red varieties with lesser amounts of solid blues and purples, red and white and blue and white combina-tions with a few of the more unusual shades and speckled types. This is a formula mixture containing only first class varieties.

Red Velvet. Our finest cardinal-red. Very strong grower, producing many

Royal Velvet. Deep purple. Strong grower.

New Cherry Belle. Deep cherry-red with white border. Produces large plants.

Pink Pearl. Soft rose-red with white center.

Fuchsia Queen. Rich shades of reddish purple or wine color. Strong

Snow Bird. Gigantic pure white, very durable flowers. Very strong grower.

Purple Cloud. Rich purple with white center.

Improved Colossal Hybrids. A particularly large flowered strain, varying in color from soft pink to red and wine colors. Beautiful soft foliage that doesn't break easily.

Above plants shipped in 2-inch Ball Plant Bands F.O.B. Florida. Price on all varieties and mixture: \$20.00 per 100; \$180.00 per 1000. Minimum order 100 plants. 250 or more plants billed at the thousand rate. Particularly on separate color varieties, we would like to have 30 days notice for shipment. These are all seedling strains-don't confuse them with varieties propagated and sold as tubers.



SAFTI-PAK

Gloxinia Seedlings

Each 21/4-inch plant is protected by an individual SAFTI-PAK container to assure you of a safe delivery. Note the careful way in which each tender seedling is nestled in its own protective shell.

Sovereign. Crimson-red.

Imperial. Brilliant scarlet.

Sapphire. Dark purple.

Blue Star. Medium blue, ivory throat. Ave Maria. Pure white.

Lady Olivia. Yellow shading to

Michael Schmidt. Red shading

Radiation. Red, orange and yellow

Sensation. Pink shading to yellow.

Tethys. Cream shading to canary-

Assorted varieties.

Prices above, each: \$25.00 per 100; \$225.00 per 1000. 500 plants billed at 1000 rate. Minimum order 100 plants, 25 of a variety. F.O.B. Louisiana.

Shipping weight 17-20 lbs. Winter packing \$1.00 per carton—no packing at other times of year.

Available year round. Immediate shipments subject to minor substitutions of varieties within the same color range.

#### GYPSOPHILA

Bristol Fairy. The popular perennial "Gyp". We offer 21/4-inch plants for spring delivery from Ohio. \$25.00 per 100 or \$225.00 per 1000. One-year field-grown stock, October delivery from Ohio, \$40.00 per 100. Minimum order 100 plants.

#### LANTANA

We offer Lantana 21/4's in the following varieties for shipment October to May.

pink.

vellow.

center.

Snow White. White.

Sunset. Yellow and red.

Alba Perfecta. Best white.

Craigi. Deep red shading to yellow. Delicatissima. Yellow shading to

Dwarf Beauty. Pink shading to vellow.

Dwarf Buckeye. Red shading to vellow

Golden King. Lemon-yellow.

Jacob Schultz. Red. La Pleur d'Or. Burnt-orange.

yellow. Prices on above varieties: \$11.00 per 100; \$100.00 per 1000.

Minimum order, 100 plants. Shipped F.O.B. Penn. and Ohio, where

Southern. Yellow shading to buff.

Gold Mound. Trailing golden yellow.

Golden Pillar. Bright gold, upright.

Silver Mound. Trailing creamy white.

Prices above 4, each: \$13.00 per 100; \$120.00 per 1000.

Minimum order 100 plants. F.O.B. Pennsylvania and Ohio, where avail-

#### PANSY

All our Pansy plants are grown by specialists from originator's seed. Delivery late September through early November.

Steele's Jumbo Mixture. \$13.50 per 1000. Steele's "400" Super Swiss Mixed. \$13.50 per 1000. Swiss Roggli Giants. \$16.50 per 1000.

Minimum order, 1000 of a variety. Shipped F.O.B. Ohio, Ill. and Va.

#### PERENNIALS

Write for prices on our complete list of perennials.

#### ALL-DOUBLE PETUNIAS

We offer the following varieties available in 2-inch plant bands and shipped in Ball-Pak. Available December through April.

Gaiety. Dwarf rose and white.

Allegro. Bright salmon.

Sonata. Pure white. Blue Moon. Purple. Rose of Canada. Bright medium

Ball All-Double Mixture. Canadian All-Double Mixture. Assorted Varieties.

Prices above, each: \$12.00 per 100; \$100.00 per 1000. 250 plants billed at 1000 price. Minimum order, 100 plants, 25 of a variety. Please order in multiples of 50. Shipped F.O.B. Ohio.



#### MISCELLANEOUS PLANTS Continued

#### HARDY PHLOX

From 21/4-inch pots. Ready April 1. The best varieties of most recent introductions.

American Beauty. White. Adonia. Fuchsia-red. Caroline Vandenburg. Lavender-

blue. Elaine. Orange-crimson.

Esquire. Deep rose-red.

Pink Charm. Clear pink. Pinkette. Pastel pink. Red Bird. Bright crimson. Starlight. Violet-red. World Peace. Pure white.

Prices above, each: \$10.00 per 100; \$90.00 per 1000.

Minimum order, 100 plants. F.O.B. Ohio.

#### PHLOX SUBULATA

(Moss or Mountain Pink)

Field-grown plants shipped from Michigan. May delivery. Minimum order 100 plants, 10 of a variety.

Prices	Per 10	Per 100
Alba. Pure white flowers	\$2.00	\$15.00
Alexander's Pink. Bright rose with red eye	2.25	17.50
Atropurpurea. Deep carmine-red	2.00	15.00
Blue Hill. Attractive light blue flowers in spring and fall. Compact growing habit		17.50
Crimson Beauty. An improved Atropurpurea. More vigorous and free flowering		17.50
Emerald Cushion Pink. Compact foliage, long flowering habit. Large pink flowers		17.50
Rosea. Pink variety	2.00	15.00
Vivid. Bright pink with darker eye	3.00	25.00
White Delight. The purest white. Bright foliage	2.25	17.50

#### POINSETTIAS STOCK PLANTS



Barbara Ecke Supreme. Most popular variety for central and northern U. S. Sold under patent restrictions.

Ecke White.

New Ecke Pink. Long bracts similar to Oak Leaf.

Indianapolis Red. Particularly fine for southern growers.

Prices on above 4 varieties, per 100 plants:

Super Jumbo, \$180.00; Jumbo, \$150.00; No. 1, \$120.00; No. 2, \$90.00; No. 3, \$60.00; No. 4, \$40.00.

Imp. Albert Ecke Mrs. Paul Ecke Ruth Ecke Oak Leaf Prices on above 4 varieties, per 100 plants: Super Jumbo, \$150.00; Jumbo, \$125.00; No. 1, \$100.00; No. 2, \$80.00; No. 3, \$60.00; No. 4, \$35.00.

Double Henriette Ecke

Prices on above 2 varieties, per 100 plants:

Super Jumbo, \$135.00; Jumbo, \$110.00; No. 1, \$85.00; No. 2, \$65.00; No. 3, \$45.00; No. 4, \$25.00.

The above prices are f.o.b. eastern points of distribution, c/o Railway Express Co. All No. 4 plants are shipped f.o.b. Encinitas, Calif. We will add 10% packing charge on all orders received after Jan. 1. All orders must be final by Feb. 1.

The following table shows an approximate number of cuttings that may be expected from various sizes of stock plants. Allow 1/3 more plants for the variety Indianapolis Red.

SUPER JUMBO PLANTS SHOULD PRODUCE 70 TO 90 CUTTINGS. JUMBO PLANTS SHOULD PRODUCE 50 TO 70 CUTTINGS.
No. 1 PLANTS SHOULD PRODUCE 40 TO 50 CUTTINGS.
No. 2 PLANTS SHOULD PRODUCE 25 TO 40 CUTTINGS.

No. 3 PLANTS SHOULD PRODUCE 10 TO 25 CUTTINGS.

#### 21/4-INCH POINSETTIAS

																						Per 1000
Barba	ra Ecke	Sur	reme																۰		\$25.00	\$225.00
Impro	ved A	lbert	Ecke						٠					٠			۰				21.00	200.00
India	napolis	Red		 											٠						24.00	220.00
Ecke	White			 							٠		٠	٠	٠	٠	٠	٠			21.00	200.00
Ecke	Pink .			 					٠			٠	٠	٠	٠	٠	۰	٠	٠	٠	21.00	200.00
			_		_			ъ.	0.5	- 0		C					1		10		A DO THE	3 T 1 1

Available August through October 1959. Shipped F.O.B. Illinois, Michigan, Indiana, Pennsylvania, Texas, Oklahoma and New York, where available. Minimum order 100 plants. 250 or more plants of a variety billed at 1000 rate. Above prices were in effect for the 1958 season, and are subject to change.

#### PRIMULA

MALACOIDES. Our plants are 21/4-inch size, shipped Sept. to Jan.

White Giant. White. Red Valentine. New red. New Baby. Dark lavender. New Giant. Pink, yellow center. New Red. Bright red. Glory of Riverside.

\$12.00 per 100; \$110.00 per 1000. Minimum order 100 plants in multiples of 50; 25 plants of a variety. Shipped F.O.B. Illinois.

OBCONICA. 21/4-inch plants shipped from June to December.

Fasbender's Red. Large deep red. Friesdorfer. Salmon. Mohnstein's Red. Deep red. Mueller's Berlin Rose. Soft rose.

Alba. White. Sky Blue.

\$12.00  $per\ 100$ ; \$110.00  $per\ 1000$ . Minimum order 100, in multiples of 50; 25 of a variety. Shipped F.O.B. New Jersey and Ohio.

#### ROSES

See pages 76-80.

#### SNAPDRAGONS

Have trouble germinating Snap seed during the hot summer months? Buy our 2-inch banded plants. Our plants are produced by specialists from Orig. F<sub>1</sub> Hybrid seed. Our Ball-Pak method of shipping assures plants arriving in tip-top shape.

For an early January crop grown on raised beds at 50°, plant 2-inch banded plants Oct. 5 for an unpinched crop, or Sept. 5 for a pinched crop. For an early March crop, plant 2-inch banded plants Nov. 10 for an unpinched crop, or Oct. 10 for a pinched crop. For early May flowering, plant 2-inch banded plants Feb. 1 for an unpinched crop, or Jan. 1 for a pinched crop. All the following varieties except Hercules and Golden Spike, we recommend for flowering from March on. Please specify whether you want plants pinched or unpinched.

Treasure Chest. Clear medium rose.

Flower Girl. Medium pink. Pink Ice. Medium rose, white lip. Navajo. Best red.

Doubloon. Deep bright yellow. Gallant Fox. Deep orange-bronze. Citation. Ivory-white. Cherokee. True scarlet-red. Libby. Dark rose. Christina. Medium light pink. Golden Spike. Golden yellow. Snowman. Pure white. Lavender Lady. Deep rosy lavender.

DOUBLOON

Shipped f.o.b. Illinois or Ohio. Minimum order 250 plants, 25 of a variety. Please order in multiplies of 50 plants. 250 plants billed at the 1000 rate. Available August through March.

Prices above Snapdragon plants, \$65.00 per 1000.

#### VERBENA Strong Rooted Cuttings

Per 100 Per 1000 Candystick. Red and white ...... . . . \$4.50 \$40.00 Schlosser's Pride. Dark red ................................. 3.50 30.00 True Beauty of Oxford. Cerise ...... 3.50 30.00 True Beauty of Oxford. Pink ...... 3.50 30.00 True Beauty of Oxford. Lavender ..... 3.50 30.00 True Beauty of Oxford. Scarlet ..... 3.50 30.00 True Mayflower. Light pink ..... 3.50 30.00 Royal Purple. Purple with white eye ..... 30.00 30.00

Strong, 21/4-inch on all above varieties: \$8.00 per 100; \$75.00 per 1000. Minimum order 250.

October to March delivery, F.O.B. Illinois. Orders for 500 or more at the





Ball bulbs are grown by specialists and are dug, graded and packed under close supervision of our Bulb Department manager. Whether you are forcing the crop or selling the bulbs to home gardeners, you can be assured of getting the best quality bulbs available.

You can't buy better bulbs anywhere at any price.

## FORCING EASTER LILIES

Just as soon as Lily bulbs are packed in the growing fields, they are loaded in refrigerated freight cars or trucks for shipment to growers who want bulbs not precooled, or to cond-storage warehouses for precooling. Precooling has the effect of bringing the burbs into flower in less time than if they were not precooled and seems to bring them into flower more uniformly. Some growers (chiefly on the West Coast) have their bulbs delivered direct from the field without precooling. They accomplish the precooling effect by potting immediately upon receipt and placing the pots in a straw covered cold frame or other location where temperatures are comparatively low—50° or less. This early potting method has the advantage of giving the bulb more time to make an ample root system before top growth starts, and usually results in a higher bud count.

Bulbs should be potted at least 2 inches below soil level so as to give the bulb an opportunity to make stem roots directly above the bulb. Soil should be very loose and well drained—a mixture of 1/3 by volume of organic matter (coarse peat or other coarse material), 1/3 coarse sand, and 1/3 good soil (adjust sand and soil to local conditions) should be satisfactory for good aeration.

Time of potting Crofts centers around the basic rule that the bulb requires approximately 120 days from potting to flowering. However, recent experimental work indicates that at least 2 weeks added to this time, combined with cool temperatures at first, encourages a better root system and a higher bud count. Pot bulbs 130 days before Easter and carry 50° for 25 days. This produces a heavy root system before top\_growth really starts. Begin forcing by moving to 60°, 105 days before Easter.

Watering should be complete and thorough at the time of potting. Thereafter they should be kept a little on the dry side until active roots are

When 60° forcing starts, move plants into full sunlight. Start regular watering and feeding. A typical feeding routine involves watering the plants every two weeks with a solution of 1 lb. calcium nitrate to 40 gals. of water. This is an alkaline fertilizer and should help to keep the pH of the soil up. If the pH gets much over 7.0 switch to ammonium sulphate at the same rate.

Height of Plants. A standard lot of true Croft bulbs can be finished very short or very tall, depending on the forcing procedure. Some factors contributing to short plants are:

- 1. Ample spacing on the bench. Crowded plants tend to stretch.
- 2. Ample light from clean glass will keep Crofts short.
- 3. A light, well drained soil mixture is necessary for short plants.
- 4. Proper and ample feeding is important. A starved plant will stretch.
- 5. Early potting tends to finish shorter plants. If Crofts are forced above 60° they will be taller than necessary.

Insect Control. Aphis are the chief problem. Parathion, Malathion, or Lindane recommended.

Leaf Scorch. Research work tends to point to a pH, lime and phosphate relationship. If the forcer will avoid phosphate fertilizers, control the pH of his soil between 6.5 and 7.0 and keep his nitrogen feeding program going as recommended, he is doing about all that can be done.

#### Root-rot Control

- 1. Use soil that will aerate well.
- 2. Don't over water or over fertilize.
- 3. Keep growing area clean.
- 4. Keep fresh air in forcing house at all times.
- 5. January 15 to February 15 knock out of pot and change position of ball of soil to break any air lock that may have developed.

Ace Lilies take less room but a higher temperature. They should not be grown in same house as Croft. Temperature should be 4 or 5° higher than Croft. Ace are known to start slow and finish fast but keep them going until time to cool them down for delivery.

#### COAST

John Maglio is shown admiring the splendid bud count on his crop of Croft Lilies. Picture was taken March 24th at the C. and M. Nursery, San Francisco, California, which is owned and operated by Milton Cafferata and John Maglio.



Don Carey, Ball's Sales Manager (right) was fortunate enough to be East on March 27th to see this fine crop of Croft Lilies at Dauernheim, Inc., Wantagh, Long Island. In the picture with Don is Mel Dauernheim, discussing the prospects for a good Easter business.





Max Bergholt, Green Mill Gardens, Addison, III. checking over his 1958 Easter crop of Ball Croft Lilies. Note high bud count and uniform growth.

## EASTER LILIES

### **CROFT**

**BALL CROFTS** are contract grown by "oldtimers" in the business. They keep in close touch with the latest scientific research in bulb production.

We personally inspect Ball Croft fields several times during the growing season. We are "on the spot" during the important digging and packing season. We know Ball Crofts are well grown, properly dug, graded and packed.

BALL CROFTS are packed as follows:

Size 7-8, 250 bulbs per case Size 8-9, 200 bulbs per case Size 9-10, 150 bulbs per case Size 10 up, 100 bulbs per case

If you specify, we can supply double-nosed bulbs by the case.

Prices established at digging time. Write for quantity prices.

### ACE

**BALL ACE** Lilies produce a smaller plant with smaller flowers than does the Croft, also Ace foliage "points up", which means less bench room. Bud count is generally higher than that of a comparable sized Croft bulb.

Ball Ace bulbs are produced by Oregon specialist growers under Ball contracts. We closely inspect these crops several times during each growing season, and personally supervise digging, grading and packing.

PLACING your order with us EARLY will help us serve you better.

**BALL ACE** are packed as follows:

Size 7-8, 250 bulbs per case Size 8-9, 200 bulbs per case Size 9-10, 150 bulbs per case

Unless you specify a delivery date, we will ship at the proper planting time for Easter forcing,

Prices established at digging time. Write for quantity prices.

BALL CROFT and ACE Lilies are dug, graded and packed in late September. For our customers who don't precool their bulbs or who do their own precooling, we will be happy to ship direct from our fields.

BML CROFT and ACE Lilies are precooled under proper temperature and moisture conditions and shipped at the proper planting time for Easter forcing, Or, if you prefer, we will ship on any date you specify. Bulbs are shipped f.o.b. our growing fields in Oregon or from the following cities: Kansas City: Dallas: Atlanta; Toledo: Springfield, Mass.; West Chicago; Elmira; Milwaukee; Philadelphia; Minneapolis and Indianapolis.

Placing your order early will help us serve you better.

Carl Ball and Phil Jones check over a bench of Lily Bulb Trials in our green-house at West Chicago, spring 1958. Each of our grower's sizes of Croft and Ace Lilies is checked each year for trueness of type, bud count, freedom from disease and uniformity.



#### JAPANESE-GROWN LILIES

#### **ERABU**

The most widely grown white trumpet Lily for midwinter and spring flowering. Bulbs available from early September on.

	Bulbs	F.O.B. Or	naha, Chicago,
	per	Toledo o	r Philadelphia
Size	case	Per 100	Per case
6-8	400	\$14.00	\$42.00
7-9	300	17.00	41.00
7-9	150 (Bah	v case)	26.00
8-10	225	21.00	39.00
8-10	100 (Bab	v case)	21.00
9-10	200	25.00	39.00
9-10	100 (Bab	v case)	25.00
10-11		30.00	38.00
10-11	100 (Bab	v case)	30.00

Less than case lots shipped from West Chicago.

#### AURATUM

The popular Gold-Band Lily. Excellent for greenhouse forcing. Also a good counter sale bulb item. Bulbs available December through March.

	Bulbs	F.O.B.	West Chicago,
	per	Toledo or	Philadelphia
Size	case	Per 100	Per case
7-9		\$17.50	\$35.00
8- 9	. 200	20.00	35.00
9-10	. 140	28.00	35.00
10-11	. 100	37.50	35.00

#### **PLATYPHYLLUM**

A variety of Auratum with less spotting. Bulbs available from December through April.

	Bulbs	F.O.B.	West Chicago,
	per	Toledo or	· Philadelphia
Size	case	Per 100	Per case
		\$18.00	\$38.00
8- 9	 200	22.00	<b>3</b> 8.00
9-10	 140	30.00	38.00

#### ALBUM

A pure white Speciosum -reflexed, Handled the same as Rubrums, Shipped from December through July,

				Bulbs	F.O.B. V	West Chicago.
				per	Toledo or	Philadelphia
Size				case	Per 100	Per case
6-8				. 330	\$30.00	\$82.50
				. 250	40.00	82.50
8- 9				. 200	45.00	82.50
9-10				. 140	65.00	82.50

#### **GIGANTEUM**

A standard white trumpet cut-flower Lily. Bulbs available from December through July.

	Bulbs	F.O.B.	West Chicago.
	per	Toledo or	Philadelphia
Size	case	Per 100	Per case
7- 9	300	\$18.00	\$45.00
8-10	225	26.00	48.00
9-10	200	29.00	53.00



Eric, Frank and Eddy Scheafer of Scheafer's Greenhouse, Montgomery, III., inspecting their 1958 crop of Ball Croft Lilies.

#### RUBRUM (Speciosum)

The most commonly grown colored cut-flower Lily. Reflex-shaped flowers, carmine-pink, with crimson spots. A good garden Lily for counter bulb sales. Bulbs available December through July.

	B	ulbs F.O.	B. West Chicago.
	Į.	er Tolede	or Philadelphia
Size	e.	ase Per 100	Per case
7- 9	2	50 \$20.00	\$41.00
8- 9	2	00 25.00	41.00
9-10	1	40 33.00	40.00
9-11	1	25 37.00	40.00
	ī		40.00

#### AMERICAN-GROWN LILIES

#### ALBUM (White Rubrum)

Speciosum White Champion Strain Size 7-8 \$59.00 per 100. Size 8-9 \$75.00 per 100.

#### $\textbf{RUBRUM} \quad (\textbf{Carmine-Pink})$

Speciosum—Red Champion Strain. Size 7-8 \$35.00 per 100. Size 8-9 \$48.00 per 100.

#### AURATUM PLATYPHYLLUM

Size 7-8 \$53.00 per 100. Size 8-9 \$68.00 per 100.

F.O.B. West Chicago. October delivery.

#### GEORGIA LILY

#### (American-grown)

Although some growers use the Georgia Lily for Easter pot plants, most Georgias are grown for the earliest cut-flower crop. Properly precooled bulbs planted in mid-September will flower in early January. Bulbs available from September on. Bulbs F.O.B. Atlanta, Philadelphia.

		per	West Chicago	cold storage
Size		case	Per 100	Per case
61/2-7				\$55.00
7- 8				62.50
			38.00	67.50
9-10		. 150	48.00	62.50
10-up		. 100	60.00	55.00
Write	for quant	ity price	38.	

#### ESTATE

#### (American-grown)

A large-flowered, long-stemmed white Lily for spring flowering. Plant in December for April and May flowering, Our bulbs are northwest-grown. Shipped f.o.b. Dallas; Kansas City; Minneapolis; West Chicago; Milwaukee; Indianapolis; Toledo; Philadelphia; Elmira; Atlanta; and Springfield, Mass.

	D 11	Per 100	Per case
Size	Bulbs per case		4
7- 8	250	\$25.00	\$55.00
	200	40.00	72.50
9-10	150	50.00	65.00



DARWIN HYBRIDS

#### **HOLLAND-GROWN BULBS**

Minimum order on Tulips, 1000 bulbs. 100 per variety and size.

Apeldoorn. Orange-scarlet base, black edged yellow ......\$6.75

Gudoshnik. Yellow spotted red ...... 9.00

Holland's Glory. Orange-scarlet, black base ...... 9.00



11-12

\$50.00

70.00

70.00

100

\$6.00

8.00

8.00

12 up 100 1000

\$58.00

80.00

80.00

		-	_		base	80.00	8.00	70.00
					ellow base 6.75	58.00		50.00
					vellow base	70.00		62.00
	Rooseveli	t. Clear o	range-red			70.00	7.25	62.00
<b>.</b>								
D 4 D344151					COTT / CT			
DARWIN		2 up		1-12		2 up		1-12
All Prints 24 in Prints and	100	1000	100	1000	Albina 20 in Puna subita #5.50	1000	100	1000
All Bright. 24 in. Bright red Aristocrat. 28 in. Violet-rose		\$44.00 44.00	\$4.75 4.75	\$38.00 38.00	Albino. 20 in. Pure white \$5.50 Carrara. 20 in. White 5.50	\$44.00 44.00	\$4.75 4.75	\$38.00 38.00
Bartigon. 24 in. Cochineal-red .		44.00	4.75	38.00	Golden Harvest. 26 in. Lemon-yellow 5.00	40.00	4.50	35.00
Bartigon Max. Larger form of Ba					Golden Measure. 26 in. Deep canary-			-5.00
gon		44.00	4.75	38.00	yellow 5.00	40.00	4.50	35.00
Campfire. 24 in. Blood-red		44.00	4.75	38.00	Mother's Day. Lemon-yellow 5.50	44.00	4.75	38.00
City of Haarlem. 28 in. Scarlet Clara Butt. 24 in. Salmon, rosy		58.00 44.00	6.50 4.75	54.00 38.00	Princess Margaret Rose. Yellow- orange and red 5.00	40.00	4.50	35.00
Cordell Hull. 24 in. Red on white		44.00	4.75	38.00	Smiling Queen. Dark pink edged	10.00	4.50	33.00
Demeter. 28 in. Reddish pur	rple.				silver 6.25	52.00	5.75	47.00
Early		44.00	4.75	38.00				
Desiree. 24 in. Brilliant oran		44.00	4.75	38.00	TRIUMPH			
Farncombe Sanders. 28 in. Scarlet	5.50	44.00	4.75	38.00	Alberio. Cherry-red, edged yellow 5.50	44.00	4.75	38.00
Golden Age. 24 in. Yellow flus					Algiba. Purple-mauve, edged lilac 5.50	44.00	4.75	38.00
salmon-orange		44.00	4.75	38.00	Aviateur. Carmine-red, edged white 5.50	44.00	4.75	38.00
Insurpassable. 26 in. Lilac		44.00	4.75	38.00	low 5.00	40.00	4.50	35.00
La Tulipe Noire. 26 in. Deep vel- maroon-black		44.00	4.75	38.00	Blizzard. Creamy white	90.00	9.00	80.00
Mamasa. 26 in. Bright butterd	cup-			••••	Crater. 16 in. Carmine-red 5.50	44.00	4.75	38.00
yellow	5.50	44.00	4.75	38.00	Denbola. 16 in. Cerise-red with cream 6.25	52.00	5.75	47.00
Montgomery. White edged carm		46.00	5.00	40.00	white	40.00	4.50	35.00
red	5.50	44.00	4.75	38.00	Elizabeth Evers. 15 in. Beautiful	40.00	7.50	33.00
Paul Richter. 22 in. Geranium-r	ed;			50.00	pink 5.50	44.00	4.75	38.00
early	5.50	44.00	4.75	38.00	Elmus. 18 in. Cherry-red, white			
Philip Snowden. 24 in. Light carm		44.00	4.75	20.00	border 5.50	44.00	4.75	38.00
Pride of Haarlem. Large cerise		44.00 44.00	4.75 4.75	38.00 38.00	Kansas. 16 in. Snow-white 5.50 Makassar. Canary-yellow 5.50	44.00 46.00	4.75 5.00	38.00 40.00
Pride of Zwanenburg. Salmon-p		52.00	5.75	47.00	Nivea. Pure white 6.50	54.00	5.75	48.00
Princess Elizabeth. 26 in. Rose		44.00	4.75	38.00	Paris. Orange-red, edged yellow 5.50	46.00	5.00	40.00
Prunus. 24 in. Salmon-pink		44.00	4.75	38.00	Red Giant. 16 in. Soft red 5.50	44.00	4.75	38.00
Red Pitt. 24 in. Bright red		44.00 40.00	4.75 4.50	38.00 35.00	Telescopium. Violet-rose 5.00	40.00	4.50	36.00
Rose Copeland. 24 in. Lilac-rose . The Bishop. 28 in. Violet-purple .		44.00	4.75	38.00	MENDEL			
Utopia. Cardinal-red		44.00	4.75	38.00				
Wm. Copeland. 24 in. Lavender		40.00	4.50	35.00	Athleet. Pure white sport of Weber 5.50 Fuga. Blood-red 5.50	44.00 44.00	4.75	38.00 38.00
Wm. Pitt. 24 in. Cochineal-red		44.00 52.00	4.75 5.75	38.00 47.00	Her Grace. 18 in. Pink and white 5.50	44.00	4.75 4.75	38.00
Zwanenburg. 26 in. Ivory Choice Mixture of Darwin Tu		40.00	4.50	35.00	Krelage's Triumph. 14 in. Deep red			30.00
					for early forcing 5.00	40.00	4.50	35.00
EARLY SINGLE					Olaf. 14 in. Scarlet, early forcing 5.50 Piquante. Carmine, edged white 5.50	44.00	4.75	38.00
Brilliant Star. Brilliant scarlet .	7.00	60.00	5.50	45.00	Topscore. 14 in. Geranium-red, yel-	44.00	4.75	38.00
Couleur De Cardinal. Deep scarlet	, . , <b>7.2</b> 5	63.00	6.50	54.00	low base 6.50	54.00	5.75	47.00
General De Wet. Yellow flus	hed	56.00	6.25	52.50	Vander Eerden. Glowing red 5.00	40.00	4.50	35.00
orange	low 6.50	56.00 56.00	5.75	47.00	PARROT			
Pink Beauty. 12 in. Deep rose						44.00	4	20.00
white	7.00	60.00	6.50	54.00	Blue Parrot. 24 in. Lavender 5.50 Fantasy. 22 in. Deep salmon, blotch-	44.00	4.75	38.00
Van Der Neer. Violet		48.50 60.00	5.25 6.50	42.50 54.00	ed green 5.50	44.00	4.75	38.00
Choice Mixture of early singles		48.50	5.25	42.50	Firebird. Vermilion-scarlet sport of			
	<del>-</del>		-	-	Fantasy 5.50	44.00	4.75	38.00
EARLY DOUBLE					Orange Favorite. Orange-green 5.50 Red Champion. Bright crimson-red 6.25	44.00 52.00	4.75 5.75	38.00 47.00
Electra. 10 in. Deep cherry-red .		56.00	5.75	47.00	Sunshine. Golden yellow 5.75	48.50	5.00	40.00
Marechal Niel. 10 in. Yellow flued orange		56.00	5.75	47.00		-		
Mr. Van Der Hoef, 10 in. Pure	vel-		2		BOTANICAL			
low	6.50	56.00	5.75	47.00	Red Emperor. Fiery scarlet, 6.75	E0 00	6.00	E0 00
Murillo. White flushed pink		58.00 56.00	5.75 5.75	47.00 47.00	ned Emperor. Plety Scatter, 6./5	58.00	6.00	50.00
Orange Nassau. 10 in. Orange-red Peach Blossom. 10 in. Deep pink		56.00	5.75	47.00	LATE DOUBLE			
Schoonoord. Pure white		63.00	6.50	54.00	LATE DOUBLE			
Triumphator. Deep pink	6.50	56.00	5.75	47.00	Coxa. Carmine-red, light edge 5.50	44.00	4.75	38.00
Choice Mixture of early doubles	5.75	48.50	5.25	42.50	Uncle Tom. Dark glossy red 5.50	44.00	4.75	38.00
86		Prices	are subi	ect to cha	ange for 1959 delivery.			
			,		·			



#### AMERICAN-GROWN TULIPS

We offer American-grown bulbs of the following varieties. Available in September. Prices are f.o.b. the following shipping points for orders of 1,000 bulbs or more: Denver; Omaha; Kansas City; Dallas; Minneapolis; Milwaukee; West Chicago; St. Louis; Atlanta; Jersey City; Detroit; Indianapolis; Cincinnati; Elmira; Pittsburgh; and Springfield, Mass.

	1.2	up	11	-12		12	up	11	-12
	100	1000	100	1000		100	1000	100	1000
*Albino. (Cottage). Pure white		\$45.00	\$4.75	\$37.50	Krelage's Triumph. (Mendel).				
All Bright. (Darwin). Bright red		45.00	4.75	37.50	Crimson-red	\$5.50	\$45.00	\$4.75	\$37.50
*Bartigon. (Darwin). Crimson-red		45.00	4.75	37.50	La Tulipe Noire. (Darwin). Purple-				•
Blue Parrot. (Parrot). Dark laven-					black	5.50	45.00	4.75	37.50
der		45.00	4.75	37.50	Niphetos. (Darwin). Soft sulphur-				
Campfire. (Darwin). Blood-red		45.00	4.75	37.50	yellow	5.50	45.00	4.75	37.50
Carrara. (Cottage). White		45.00	4.75	37.50	Nivea. (Triumph). Creamy white	6.50	52.50	5.50	45.00
City of Haarlem. (Darwin), Deep					*Olaf. (Mendel). Scarlet; early	6.50	52.50	5.50	45.00
red		52.50	5.50	45.00	*Paul Richter. (Darwin). Geranium-				
Clara Butt. (Darwin). Salmon, rose-					red	7.00	60.00	5.50	45.00
pink		45.00	4.75	37.50	Princess Elizabeth. (Darwin). Rose		45.00	4.75	37.50
Cordell Hull. (Rembrandt). Red on					Philip Snowden. (Darwin). Car-				
white	5.50	45.00	4.75	37.50	mine-rose		45.00	4.75	37.50
*Demeter. (Darwin). Reddish pur-					Prunus. (Darwin). Salmon-pink		45.00	4.75	37.50
ple; early		45.00	4.75	37.50	*Red Pitt. (Darwin), Cochineal-red		45.00	4.75	37.50
*Elmus. (Triumph). Cherry-red,					Rose Copeland. (Darwin). Lilae-				
white border		45.00	4.75	37.50	rose	5.50	45.00	4.75	37.50
Fantasy. (Parrot), Salmon-pink	5.50	45.00	4.75	37.50	*Smiling Queen. (Cottage). Dark				
Farncombe Sanders. (Darwin).					pink, edged silver		52.50	5.50	45.00
Cochineal-red		45.00	4.75	37.50	*Topscore. (Mendel). Geranium-				
*Golden Harvest. (Cottage). Lemon-					red, yellow base		60.00	5.50	45.00
yellow		45.00	4.75	37.50	*Utopia. (Darwin). Cardinal-red		45.00	4.75	37.50
Golden Measure. (Cottage). Deep					*Wm. Copeland. (Darwin). Lavender		45.00	4.75	37.50
canary-yellow		45.00	4.75	37.50	*Wm. Pitt. (Darwin). Cochineal-red		45.00	4.75	37.50
Insurpassable. (Darwin). Lilac		45.00	4.75	37.50	Zwanenburg. (Darwin). White-				
Korneforus. (Triumph). Light red	5.50	45.00	4.75	37.50	ivory	5.50	45.00	4.75	37.50
					C 1-4- /	10001	.::	. J	

Case lots (1000) minimum order.

	VALENTI	NE'S DAY	MARCH	EASTER
RED	Regular Krelage's Triumph Olaf Orange Nassau Paul Richter Red Pitt Wm. Pitt	American Precooled Bartigon Paul Richter Topscore	Bartigon Campfire Olaf Red Pitt Wm. Pitt Red Giant Paul Richter Roosevelt Oxford	Bartigon Campfire Crater Electra Orange Nassau Red Giant
PINK and ROSE	Peachblossom Rose Copeland Smiling Queen		Philip Snowden Pr. Elizabeth Rose Copeland	Philip Snowder Pr. Elizabeth Prunus Peachblossom
LAVENDER and PURPLE	Demeter	Demeter	Insurpassable	Algiba
YELLOW	Golden Harvest Mamasa Mr. Van der Hoef	Golden Harvest	Mamasa Wakassar	Mr. Van der Hoef Niphetos Makassar
WHITE	Albino Athleet	Albino	Albino Carrara	Albino Carrara Nivea
BICOLOR	Denbola Elmus		Denbola Cordell Hull Montgomery Paris	Denbola Paris

\*We offer precooled bulbs (stored for 6 weeks at 40° and 75% to 85% relative humidity) of the varieties starred, size 12 up only, f.o.b. the following cold storage shipping points: Denver; Dallas; Omaha; Minneapolis; Milwaukee; Indianapolis; Atlanta; Elmira; Jersey City; West Chicago; and Springfield, Mass. Available in late October. Minimum order for precooled bulbs, 1,000; 250 of a variety. Allow \$2.00 additional per 1,000 bulbs for precooling.

Recent work by the U.S.D.A. indicates the possibility of eliminating the 4 to 6 week cool temperature storage **after** potting by prolonged precooling of bulbs **before** potting. For instance, Wm. Pitt, Golden Harvest and Paul Richter were successfully forced by precooling at 40° for 12 weeks and then put directly into 60° forcing. This prolonged precooling period apparently has the effect of conditioning the roots to develop more rapidly so that a separate root-development period is not necessary.

If further tests prove successful, this prolonged precooling procedure should eliminate the costly work of storing and moving flats during the rooting period.

Use Correct Varieties. Some Tulip varieties force well and others don't. Some are excellent for early forcing and others for midseason or late. Use the table at left to help you choose correct varieties.



#### AMERICAN-GROWN

One of our most widely grown and profitable cut-flower bulb crops -particularly for the greenhouse operator who frequently fits a crop of precooled Iris into his schedule as a quick-turnover, mid-winter "catch crop." Although Wedgewood is the standard for early forcing, there are several other excellent blues, whites and

There are three principal seasons for greenhouse Iris flowering. Each requires different forcing conditions and the question of varieties is most important. See August, 1956, GROWER TALKS or BALL RED BOOK for detailed cultural information.





BLUE RIBBON

WHITE PERFECTION

#### WEDGEWOOD (Light Blue) American-Grown

<b>PRECOOLED.</b> See (2) below for	
	All prices are per 1,000 bulbs
Bulb Size	Min. Amt. 1,000 5,000 10,000
8 1/2 - 9	. 2500 \$21.50 \$21.00 \$20.50
9-10	. 1500 34.50 33.50 32.50
10-11	. 1000 54.50 53.00 51.50
11 up	1000 62.00 60.00 58.00
•	

**REGULAR.** See (1) below for f.o.b. points.

	All	prices are	per 1,000	bulbs
Bulb Size	1,000	5,000	10,000	20,000
8 ½ - 9	\$20.00	\$19.50	\$19.00	\$18.00
9-10	. 33.00	32.00	31.00	29.50
10-11	. 52.50	51.00	49.50	47.50
11 up	60.00	58.00	56.00	54.00

#### **BLUE RIBBON** (Prof. Blaauw)

PRECOOLED. (8 weeks) heat	cured. See (	2) below for	f.o.b. points.
	All pr	ices are per	1,000 bulbs
Bulb Size	Min. Amt.	1,000	5,000 10,000
9-10	1500	\$35.50 \$	34.50 \$33.50
10-11	1000	55.50	54.00 52.50
11 up	1000	63.50	51.50 59.50
-			

REGULAR (not precooled). F.O.B. warehouse. See (1) below.

YELLOW

	All pi	nces are	per 1,000	bulbs
Bulb Size	1,000	5,000	10,000	20,000
8 1/2 - 9	\$22.00	\$21.00	\$20.00	\$19.00
9-10		32.00	31.00	29.50
10-11	52.50	51.00	49.50	47.50
11 up	60.00	58.00	56.00	54.00
(For best results precool for 8 we	eeks befor	e planting	g).	

#### OTHER AMERICAN-GROWN

	OTHER AMERICA	4-0KO 11 14									
	GULAR										
YELLOW WHITE Golden Harvest White Superior Yellow Queen White Perfection Moonlight Joan of Arc Pacific Gold Snowdrift	BLUE Imperator Van	Vliet Per 1000 Bulbs									
ORCHID											
The Orchid	Size	1000 5000									
Per 1000 Bulbs	6-7	\$16.00 \$15.00									
Size 1000 5000	7-8										
6-7 \$19.00 \$18.00 7-8 31.00 29.00 8-9 46.00 44.00	8-9	31.00 30.00									
Minimum order 1000 bulbs. F.O.B. warehouses. See (1) below. Less than case lots F.O.B. West Chicago.	Minimum order 1000 bulbs. F.O (1) below. Less than case lots F										

#### **PRECOOLED**

Golden Harvest	White Perfection
Moonlight	Snowdrift
Pacific Gold	White Superior
Size <b>8-9</b>	Per 1000 Bulbs 1000 5000 \$48.00 \$46.00

WHITE

Minimum order 1000 bulbs. Delivery mid-November. For F.O.B. points see (2) below. (For best results precool for 8 weeks before planting).

#### AMERICAN-GROWN IRIS COLLECTIONS

For our customers who need smaller amounts each of the best forcing varieties, we offer the following collections with the benefit of larger-quantity prices. These varieties are excellent for forcing from February on. See (1) below for f.o.b. points. Delivery from September on. If you wish these collections precooled, add \$2.00 per thousand bulbs; see (2) below for f.o.b. points. Precooled delivery from mid-November on.

#### AMERICAN IRIS COLLECTION A

250 Blue Ribbon. 10-11.

250 Snowdrift. 8-9, 250 Moonlight. 8-9

250 Pacific Gold. 8-9.

1000 bulbs for \$46.00

#### AMERICAN IRIS COLLECTION B

500 Blue Ribbon, 10-11.

500 Snowdrift. 8-9.

500 Moonlight, 8-9, 500 Pacific Gold, 8-9,

2000 bulbs for \$92.00

#### NOTES:

(1) Regular (not precooled) prices are quoted f.o.b. the following cities: Denver; Dallas; Omaha; Minneapolis; Milwaukee; Indianapolis; Elmira; Atlanta; Jersey City; Springfield, Mass.; West Chicago; Kansas City, Kansas; St. Louis; Detroit; Cincinnati; and Pittsburgh.

(2) Precooled bulb prices are quoted f.o.b. the following cities: Denver; Dallas; Omaha; Minneapolis; Milwaukee; Indianapolis; Elmira; Atlanta; Jersey City;

Springfield, Mass.; and West Chicago.

Delivery on regular Iris bulbs from eastern warehouses, mid- to late September on; precooled Wedgewood from eastern warehouses, mid- to late October on; precooled bulbs of all other varieties from mid-November on.

Wedgewood bulbs are precooled at 48° for 6 weeks; all other varieties 48° for



#### HOLLAND-GROWN IRIS

A good buy for greenhouse flowering from March throughout the spring. Also good for outdoor flowering in warm climates or in cold frames in the North. Delivery from October on.

Minimum order, 500 bulbs and 100 bulbs per variety and size. F.O.B. West Chicago. Case lots f.o.b. East Coast, South Coast, or West Coast ports of entry if order is received by us before August 15. Cases contain: 6,000 6-7; 4,000 7-8; and 3,000 8-9.

	Price per 1000								
	6-7	7-8	8-9						
Van Vliet. Dark blue	.\$10.00	\$18.00	\$25.00						
Imperator. Late dark blue	. 10.00	18.00	25.00						
Golden Harvest. Deep golden yellow	. 10.00	18.00	25.00						
Yellow Queen. Golden yellow	. 16.00	25.00							
White Excelsior. Pure white	. 10.00	18.00	25.00						
White Superior. Pure white	. 15.00	20.00	30.00						
White Perfection. Pure white	. 15.00	20.00	30.00						

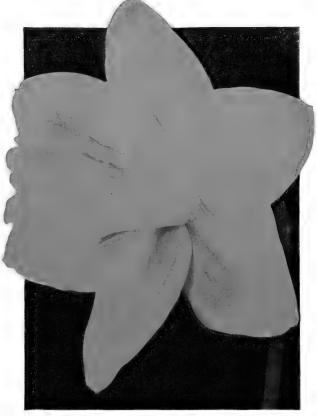
## DAFFODILS

#### AMERICAN-GROWN

	F.O.B	gular . points, ) below	Precooled F.O.B. points, see (2) below			
King Alfred	Per 100	Per 1000	Per 100	Per 1000		
Jumbo	9.50	\$110.00 85.00 60.00	\$13.00 11.00	\$115.00 95.00		
Rembrandt						
DN No. 1		105.00 80.00	13.00	115.00		
Golden Harvest						
DN No. 1		115.00 90.00	14.00	125.00		

Delivery from September on. Precooled bulbs delivered from mid- to late October. Minimum order for precooling: 250 bulbs per variety and size. 250 bulbs priced at thousand price. Othor Variation

Other Vari	eties			
	No. 1	DN	No. 2	
Beersheba. Pure white trumpet	Per 100 \$15.00	Per 1000 \$140.00	Per 100 \$12.00	Per 1000 \$110.00
Flower Carpet. Deep yellow	9.50	85.00	7.00	60.00
Mrs. E. H. Krelage. Creamy white	10.50	95.00	7.50	65.00
Spring Glory. White with yellow trumpet	12.00	110.00	9.00	80.00
Queen of the Bicolors. White with vellow trumpet	13.00	120.00	10.00	90.00
Actaea (Poeticus). White with vellow cup edged red	9.00	80.00	7.50	65.00
Cheerfulness (Double Poetaz). Creamy white	8.00	70.00	6.50	55.00
Cragford (Poetaz). Large white perianth, orange-	10.50	95.00	7.50	65.00
Fortune (Incomparabilis). Perianth golden yellow with deep orange cup	9.50	85.00	7.00	60.00
Geranium (Poetaz). Pure white, orange cup	9.00	80.00	7.00	60.00
Laurens Koster (Poetaz). White with orange, yellow cup	8.00	70.00	6.50	55.00
Scarlet Elegance (Incomparabilis). Yellow-orange with red cup	9.50	85.00	7.50	65.00
Texas (Double). Yellow and fiery orange	11.00	100.00	9.50	85.00



(1) All American-grown Daffodil bulbs shipped f.o.b. the following cities (minimum order 250 bulbs—smaller orders shipped f.o.b. the following cities (minimum order 250 bulbs—smaller orders shipped f.o.b. West Chicago): Denver; Dallas; Omaha; Minneapolis; Milwaukee; Indianapolis; Elmira; Atlanta; Jersey City; Springfield, Mass.; West Chicago; Kansas City, Kansas; St. Louis; Detroit; Cincinnati; and Pittsburgh.

Precooled bulbs shipped f.o b. the following cities: Denver: Dallas; Omaha; Minneapolis; Milwaukee; Indianapolis; Atlanta; Elmira; Jersey City; Springfield, Mass; and West Chicago.

#### HOLLAND-GROWN

September delivery. We offer the following f.o.b. West Chicago, East Coast, South Coast, West Coast, or Great Lakes ports of entry, if orders in case lots are received by us before July 1st. Cases hold 500 bulbs of

DN No. 1 100 Per 1000 DN No. 2 Per 100 Per 1000 **DOUBLE VARIETIES** \$75.00 Texas. Yellow and orange . . . . . \$ 9.75 Twink Creamy white, orange center 9.75 \$ 87.00 \$ 8.50 87.00 8.50 75.00 Von Sion. Yellow ..... TRUMPET VARIETIES 110.00 9.50 Beersheba. Pure white ..... 12.00 Flower Carpet. Deep yellow

Golden Harvest. Golden yellow

King Alfred. Golden yellow 9.50 85.00 12.00 110.00 90.00 115.00 10.00 70.00 8.00 90.00 10.00 70.00 90.00 Mrs. E. H. Krelage. Creamy white ... 10.00 Mount Hood. Pure ivory-white ..... Queen of Bicolors. White with yellow 10.00 90.00 8.00 70.00

10.00

trumpet

Rembrandt. Dark golden yellow ... 10.00

Trumpet and Large Cupped varieties, DN No. 1, or 750 bulbs of DN No. 2. Cases of Poetaz and Double varieties: DN No. 1 hold 750 bulbs, or 1250 bulbs of DN No. 2.

	DN	No. 1	DN I	No. 2		
Pe	er 100	Per 1000	Per 100	Per 1000		
LARGE-CUPPED VARIETIES						
Dick Wellband. White orange-red cup\$	10.00	\$ 90.00	\$ 8.00	\$70.00		
Fortune. Yellow, orange cup	10.00	90.00	8.00	70.00		
Mrs. R. O. Backhouse. Creamy white,						
shell-pink cup	10.00	90.00	8.00	70.00		
Scarlet Elegance. Yellow, cup deep						
orange-red	9.50	85.00	8.00	70.00		
Actaea. White, scarlet eye	9.00	80.00	7.50	65.00		
POETAZ VARIETIES						
Cheerfulness. White with yellow center	8.50	75.00	7.00	60.00		
Geranium. White with deep orange-red						
cup	8.50	75.00	7.00	60.00		
Laurens Koster. White, yellow cup	8.50	75.00	7.00	60.00		
L'Innocence. White, yellow cup	8.50	75.00	7.00	60.00		

#### PREPARED HYACINTHS

90.00

8.00

8.00

70.00

70.00

Should be used for earliest forcing. Bulbs have been exposed to a special heat treatment in Holland. This treatment causes the bulbs to force earlier and more uniformly. Prepared bulbs are graded and sold as 1st size, 2nd size and 3rd size; the 1st size grade being the largest available.

PINK	WHITE L'Innoce	WHITE L'Innocence. Pure white.										
Anna Marie. Clear pink.  Delight. Light pink.  Pink Pearl. Rosy pink.	Delft Blo	BLUE Bismarck. Light porcelain-blue. Delft Blue. Porcelain-blue. Ostara. Violet-blue.										
Prices on above:           Per 100           Per 1000	1st size \$ 16.50 155.00	2nd size \$ 14.50 135.00	3rd size \$ 12.00 110.00									

Bulbs available September. Above prices are f.o.b. West Chicago, East Coast, South Coast, West Coast, or Great Lakes ports of entry if ordered in case lots (500 bulbs or more) and by July 1.





## **HYACINTHS**

#### An Easy, Profitable, Quick-Turnover Crop!

Three important fundamentals in forcing Hyacinths:

- 1. Choose Proper Varieties. Use prepared bulbs (Pink Pearl, Bismarck or L'Innocence) for earliest forcing. Varieties listed below are marked for their forcing season. Use only 18-19 or 19 up bulbs for early forcing, and 17-18 for later forcing.
- 2. Establish a Good Root System and Top Growth Before Forcing. Pot bulbs and place in a dark location at 50° until roots are well started and top growth is at least 1 inch out of the pot. For later flowering, pots may be left in 50° until just before buds begin to open.
- **3. Forcing.** Bring out of 50° storage into a 65 or 70° greenhouse with shade. When shoots begin to grow remove shade and force to flowering at 60°. When flowers begin to show color reduce temperature to 50° to harden.

See August, 1956 GROWER TALKS or BALL RED BOOK for complete Hyacinth forcing directions.

#### REGULAR HYACINTHS

LIGHT AND DARK BLUE.

Bismarck. Light porcelain-blue, very early forcer. Delft Blue. Porcelain-blue, medium forcer. King of the Blues. Dark blue, late forcer. Ostara. Violet-blue, medium forcer.

Prices on above:

19 up	18-19	1/-18	16-17	15-16	14-15
Per 100 \$ 16.5	0 \$ 14.50	\$ 12.00	\$10.50	\$ 9.00	\$ 7.50
Per 1000 155.0	0 135.00	110.00	95.00	80.00	65.00

Hyacinth bulbs are packed as follows:

19 up and 18-19, 50 bulbs per bag. 15-16, 175 bulbs per bag. 17-18 and 16-17, 100 bulbs per bag. 14-15, 200 bulbs per bag. 17-18 and 16-17, 100 bulbs per bag. 14-15, 200 bulbs per bag. Bulbs available September. Above prices are f.o.b. West Chicago, East Coast, South Coast, West Coast, or Great Lakes ports of entry if ordered in case lots (500 bulbs or more) and by July 1.

#### WHITE

Carnegie. Pure white, late forcing. L'Innocence. Pure white, very early.

Anne Marie. Clear pink, very early. Delight. Light pink, early.
Gertrude. Rosy pink, medium forcer. Marconi. Bright pink, late forcer. Pink Pearl. Rosy pink, very early forcer. Queen of the Pinks. Bright pink, late forcer.

Jan Bos. Scarlet, very early. La Victoire. Bright carmine-red, early. YELLOW

City of Haarlem. Golden yellow, medium forcer.

## GLADIOLUS

Our bulbs are Midwest-grown and stand vigorous state inspection for bulb disease. Shipped f.o.b. West Chicago. Available January to May. See page 95 for our resale Gladiolus collection.

,	No. 1	per 1000 No. 2 11/4-11/2 in
RED AND ORANGE	72 IN UP	1 /4 - 1 /2 in
Beacon. Scarlet, yellow throat	\$24.00	\$19.00
Burma. Deep rose-red	30.00	24.00
Daisy Mae. Tall orange, red blotch	30.00	25.00
Joe Wagenaar. Fine dark red	30.00	25.00
Orange Gold. Tall orange	26.00	22.00
Sans Souci. Tall scarlet		25.00
Valeria. Light scarlet	28.00	24.00
YELLOW		
Gene. Ruffled yellow	24.00	19.00
Gold. Golden yellow		35.00
Hopmans Glory. Tall yellow		20.00
Yellow Herald. Early yellow	25.00	20.00
LAVENDER AND PURPLE		
Aljechin. Deep velvet purple	26.00	22.00
Col. Atkinson. Tall deep lavender	35.00	30.00
Elizabeth the Queen. Ruffled lavender	24.00	19.00
King David. Ruffled deep purple		35.00
Lavender Beauty. Beautiful light lavender	26.00	22.00
Salman's Sensation. Violet-blue		42.00
90		Deigon a



	140. 1	NO. Z
	1 ½ in Up	$1\frac{1}{4}-1\frac{1}{2}$ in.
PINK, ROSE AND SALMON	-	
Beauty Blush. Blush over white	\$37.50	\$30.00
Elmers Rose. Ruffled deep rose	- 43 FO	
File 1 C C L E:	e 42.50	35.00
Ethel Cave Cole. Fine pink		18.00
C. D. Fortnam. Ruffled blush		
pink	37.50	30.00
Friendship. Early pink	30.00	25.00
Magnolia. Shell-pink	30.00	25.00
Margaret Fulton. Salmon-pink		19.00
Rosa Van Lima. Light pinkish		17.00
rose		19.00
Spic and Span. Salmon-pink		
Spic and Span, Salmon pink	30.00	25.00
Sweet Sixteen. Beautiful pink	30.00	25.00
WHITE AND CREAM		
Annamae. Early white	30.00	24.00
Columbia. Creamy white edged	1	24.00
		22.00
rose		33.00
Florence Nightingale. Tall white		24.00
Lady Anne. Fine early white	30.00	25.00
Leif Erikson. Tall, cream-white	35.00	30.00
Margaret Beaton. White, cherry		
throat	24.00	19.00
Mother Fischer. Ruffled white	42.00	35.00
Pacifica. Ruffled white		25.00
Snow Princess. Cream-white		19.00
White Gold. Large cream		
Famous Manage cream	25.00	20.00
Formula Mixture	26.00	22.00

Price per 1000

No. 2

No. 1

Minimum order 500 bulbs, 100 of a variety. 250 or more bulbs of any variety priced at the thousand price.

## **Begonias**

#### AMERICAN-GROWN

Delivery for January and early February shipped f.o.b. California at the 1000 price—later delivery shipped f.o.b. West Chicago.

ROSE FORM (Improved Camellia-Flowered)

White Light Salmon Cardinal-Red Scarlet Rose

Blush

Rose

Blush

Red-Salmon Flame-Orange Orange Yellow

Dark Salmon Dark Red Apricot Mixture

Pink American Beauty

RUFFLED CAMELLIA-FLOWERED

White Crimson-Rose Red-Salmon Scarlet

Cardinal-Red Dark Salmon Orange Yellow Pink Flame-Orange Light Salmon Dark Red Apricot Mixture

Prices on all above varieties. Minimum order 100 bulbs:

Size of bulb Per 100 Per 1000 . . \$ 9.50 \$ 85.00 1 1/4 to 1 1/2 1 ½ to 2 14.50 135.00 to  $2\frac{1}{2}$  in. .... 19.00 180.00  $2\frac{1}{2}$  to 3 in. 255.00

**DOUBLE HANGING BASKET** 

White Pink . Yellow Scarlet Red Apricot

Rose Orange Salmon Mixed

Yellow

Mixed

ROSE FORM PICOTEE

Pink Apricot

Per 1000

Rose Shades Red Shades

Salmon Shades Mixed

GIANT SINGLE FRILLED

White Dark Red Scarlet Rose Pink

Apricot Salmon

**Fascination** Orange

Prices on above varieties. Minimum order 100 bulbs:

 $1\frac{1}{4} - 1\frac{1}{2}$  in.  $1\frac{1}{2}$  - 2 in. ...\$10.50 . . . . . . . 95.00

\$ 17.50 160.00

 $2-2\frac{1}{2}$  in. \$ 22.50 21/2 in. Up \$ 29.00 200.00 275.00

#### TUBEROUS ROOTED BEGONIAS

To fill your customers' needs for bright, color-ful blooms for shady



#### BELGIAN-GROWN

Shipped f.o.b. West Chicago during December and January. F.O.B. New York in case lots; if order is received by us before October 1.

DOUBLE CAMELLIA-FLOWERED

Scarlet White Rose Orange Salmon Yellow Copper Mixed Crimson

Prices on above varieties and mixture. Minimum order 100 bulbs:

Size	of I	bulb											1	Per 100	Per 1000
1 1/4	to	1 1/2	in.	 	 					 			:	7.00	\$ 60.00
1 1/2	to	2	in.	 	 		 			 				12.00	100.00
2	to	2 1/2	in.	 			 	٠	٠					18.00	160.00

Case lots consist of 7,000  $1\frac{1}{4}$  to  $1\frac{1}{2}$  in., 3,500  $1\frac{1}{2}$  to 2 in., and 2,000 2 in. . to  $2\frac{1}{2}$  in.

## Gloxinias



#### GLOXINIAS-SPECIAL EARLY DELIVERY!

By special arrangement with our Belgian suppliers, we offer air-freight service on Gloxinia bulbs for our customers who want to get their Gloxinias started early. Delivery as soon as bulbs are ready in Belgium—usually early November. Orders must be in our office by September 1st. The following prices are for 2 in. and up bulbs of any varieties listed above. F.O.B. New York City airport. Shipments, of course, can be forwarded from New York by air-freight or express. 250 bulbs, \$78.00; 500 bulbs, \$152.00; 1000 bulbs, \$300.00.

#### BELGIAN-GROWN

Shipped f.o.b. West Chicago during December or January, F.O.B. New York in case lots, if order is received by us before September 1st. Case lots consist of 3,500  $1\frac{1}{2}$  to 2 in., 2,000 2 to  $2\frac{1}{2}$  in., and 1000  $2\frac{1}{2}$  to 3 in.

Emperor Frederic **Emperor William** Etoile de Feu King of the Reds Meteor

Mont Blanc Blanche de Meru Prince Albert Princess Elizabeth Tigrinia Mixed

Violacea Queen Wilhelmina Mixture

Prices on above varieties and mixture. Minimum order 100 bulbs:

Si	ze	of	bul	Ь											Per 100	Per 1000
1	1/2	to	2	in.	 										.\$18.00	\$170.00
2	to	2	1/2	in.	 										. 24.50	235.00

#### AMERICAN-GROWN

Delivery for January and early February shipped f.o.b. California at the 1000 price—late delivery shipped f.o.b. West Chicago.

Emperor William Roi des Rouges Etoile de Feu **Emperor Frederic** 

Blanche de Meru Prince Albert Mont Blanc Princess Elizabeth

Violacea Tigrinia Mixed Mixture

Prices on above varieties and mixture, Minimum order 100 bulbs:

Size	of I	oulb												Per 100	Per 1000
1 1/4	to	$1\frac{1}{2}$	in.				 		 	۰			 	\$17.00	\$150.00
1 1/2	to	2	in.				 							 25.00	225.00
2	to	2 1/2	in.			٠			 		٠	٠		32.00	300.00



These three Caladium varieties, Red (top), Pink (center), and Candidum (in foreground) are similar to those contained in our kit. This color illustration is the same one used in our 14 x 22 inch four-color Swiss-printed poster, included with every kit.

# RETAIL GROWERS: Offer CALADIUMS For Spring Bedding Plants Next Spring — We have developed a special growing-selling kit to get you started.

Here is a bedding plant which is really different and striking. Caladiums are generally familiar to anyone as "Elephant Ears" and have been widely grown as an indoor pot plant. However, their usefulness as a bedding plant subject is spectacularly attested by the experience of Gulf Coast gardeners who use them for **porch boxes**, **urns**, **entrance plantings**, and for general bedding use wherever some shade is provided.

Caladiums are not always easy to start, which we believe is the main reason they are not more widely used as a bedding plant subject in the North. They require lots of heat—soil temperature of about  $80^\circ$  for starting—they'll take up to  $90^\circ$ .

Starting Caladiums is not difficult with this kit. The kit has been thoroughly field-tested by growers in various parts of the U. S. In the Chicago latitude it is recommended to start the bulbs in a bench over a cable in mid-April. The plants will be ready for sale in early lune, which is the recommended time for planting out, Printed instructions which come with the kit detail different starting and planting dates for other parts of the country.

Caladiums are profitable—a well started Caladium bulb in a 3-inch lifty-Pot ready for window box or garden planting should retail for 75c or thereabouts. Not allowing for culls or unsold plants, at 75c your cross take on 250 bulbs is \$187,50. The cable, of course, can be reused.

Complete description of kit on opposite page.

#### Caladium Kit Prices

(Prepaid anywhere in the U. S.)

"A" Kit: Contains No. 2 bulbs  $(1\text{-}1^1_2)$  in.) for good mass display. See opposite page for contents of kit.

"B" Kit: The same as "A" Kit except contains larger No. 1 bulbs (1½-2 in.) for more breaks and larger leaves.

Heating Cable: Kits are available with or without heating cable.

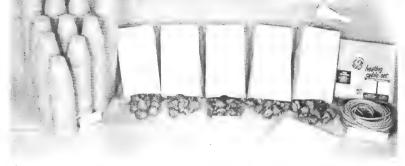
With Cable Without Cable

Quantity discount: 4 or more kits, 10%.

Our Caladium kit is complete and self-contained—it supplies all you need to go into the Caladium business for bedding plant sales. You supply only 10 to 12 feet of bench space and necessary labor. Plants that have not been sold at the close of the bedding plant season can be potted up and grown on to larger sizes for sale as colorful plants for house or patio display.

## **CALADIUM KIT "A" CONTAINS**

- 1 60 ft. Heating Cable (optional)
- **Bulbs,** No. 2 (70 red, 35 each of 2 varieties; 70 pink, 35 each of 2 varieties; and 110 Candidum).
- 250 3 inch Jiffy-Pots
  - **3 Full-color Swiss-printed posters** to hang over your display, featuring illustration of Caladiums in use in the garden (opposite page).
  - 5 Wooden Pot Labels
  - 1 9 x 12 Plastic Cover to conserve heat and moisture in the starting bench.
  - 1 Complete set of instructions on culture (for growers who are not familiar with Caladium culture).
  - 1 Ad Mot of our suggested ad for insertion in your local newspaper to help sell the started plants.
  - 50 Copies of our specially prepared pamphlet of instructions to home gardeners describing the culture and uses of Caladiums. These are to be given by you free to your Caladium customers.



Pictured are the items contained in your Ball Caladium Kit (fully listed left). Through the use of this kit you can grow quality Caladiums for spring bedding plant sales.



(1). The heating cable is placed on top of 1 inch of gravel and covered with peat and sand mixture. (2). The Caladiums were planted in Jiffy-Pots, set firmly on the sand-peat mixture, and covered with the plastic cover. (3). Caladiums were ready for sale in 5 weeks from the planting date.

# Tancy Leaf VARIETIES CALADIUM GENERAL VARIETY LIST Strap Leaf (Lance) VARIETIES

Ball Caladium bulbs are top-quality, Florida-grown. In the event of shortages of sizes you order (some varieties do not make Mammoth or Jumbo bulbs) we will ship the largest available size rather than a different variety. Minimum order, 50 bulbs. Bulbs shipped f.o.b. Florida. Available from December on.

**AARON.** A new variety, creamy white center with narrow green border. **CANDIDUM.** White with green veins, The leading white variety.

MRS. F. M. JOYNER. A very colorful new white. Vigorous and tough. White in inside culture, copper-red in outside culture.

WHITE CHRISTMAS. Similar to Candidum. All white between green midribs; green border. Very bushy.

ACE OF HEARTS. Dwarf. Rose center, green border, scarlet ribs.

CRIMSON WAVE. Crimson with dark green border. Large, crinkled, transparent leaves.

EDNA. Large glossy leaves. Brilliant red color.

MRS. W. B. HALDEMANN. Red center; narrow green margin. Bushy.
FREIDA HEMPLE. Dwarf. Very bright red center with green border.
ITACAPUS. Dark red with small brighter red spots.

JUNE ROSE. Rose-red center with green border.

KATHLEEN. A distinctive pink, with strong, low growing leaves.

LADY IN RED (Madam Truall). Deep purplish red with deeper colored ribs and bronze-green edges.

LORD DERBY. Transparent rose leaves, dark ribs, narrow green border. DR. T. L. MEADE. Bronze-red leaves; bright red midribs and veins.

FANNIE MUNSON. Bright crimson; scarlet ribs, narrow green edge.

MRS. ARNO NERHLING. Bronze leaf eventually turning white with pink hue. Bright red midribs. Low growing, stocky variety.

MISS SYLVIA PIERCE. Cerise center with green border. Large leaves. PINK CLOUD. Good grower, medium tall. Crumpled leaf, mottled pink. PINK LADY. Showy pink leaf with red midribs and narrow green border. POECILE ANGLAIS. Deep crimson leaf bordered metallic green.

RED FLARE. Scarlet, blotched with two shades of green.

ROSEBUD. Dwarf. Rose leaf with light green border.

MRS. F. SANDERS. Dark green leaf heavily blotched deep rose. Roundish large leaves.

SEA GULL. White lacy network on green background. Bushy.

SPANGLED BANNER. Dark red leaf, heavily spotted with pink.

**SPOTLIGHT.** Bright red, narrow green border. Bushy. **SUNBURST.** Bright red center with red spots surrounded by gold hue on green background. Medium size, very bushy.

TEXAS BEAUTY. Dwarf. Bronze-green leaf heavily blotched with pink; bright red midribs. Large leaves.

THOS. TOMLINSON. A very low growing, leafy variety that produces an outstanding pot. Brilliant red with narrow green margins.

 Per 100 Per 1000
 No 2 \$ No. 1 \$ Jumbo \$ 35.00
 Mammoth \$ 35.00

 Per 1000
 \$ 12.00 \$ 17.50 \$ 27.50
 \$ 35.00

 \$ 150.00 \$ 250.00
 \$ 325.00

Normally the largest obtainable in the following varieties are No. 1's. Many varieties do not even make No. 1's. If you are interested in the largest bulbs please submit your order to read "the largest size available."

ELIZABETH LOU, Beautiful pattern of deep green ribs on a magenta background.

HORATIO SID. Light green background with dark green overcast flowing over the entire leaf. Edges outlined scarlet.

MUMBO. Red-pink with scarlet midriff, ribs, and veins. An emerald-green forms the outer edge.

E. O. ORPET. Small leaves; crimson-red center with scarlet midriff. A solid green works its way into the crimson center.

RED FRILL. Very bright red leaves with frilled edges. Many leaves.
RIPPLE. Rippled shaped leaf with deep shadings of medium green;
blotched with magenta.

ROSALEE. Vivid scarlet midriff, ribs and veins contrast with a rose-red background. Deep green barder

background. Deep green border. **TWENTY GRAND.** Broad strap leaf with a deep green edge. Overall pattern light green with splotches of pink and red.

WHITE GLORY. A white faced leaf surrounded with a crimson line running into delicate veins around the edge. Green ribs and veinings. WHITE WINGS. White-green background outlined and splotched with bright red, and emerald-green veining.

		110. 2	140 1	Juilloo
		$1-1\frac{1}{2}$ in. 1	$\frac{1}{2} - 2\frac{1}{2}$ in.	$2\frac{1}{2} - 3\frac{1}{2}$ in.
Per 100		\$ 12.00	\$ 17.50	\$ 27.50
Per 1000		100.00	150.00	250.00
F	O D Florido I	Alimann Dagar	shor 15 on	

F.O.B. Florida. Delivery December 15 on.

#### CALADIUM COLLECTIONS

Ball Caladium Collections have been sales tested and consist of those varieties in popular demand. Each collection is packed in a display carton complete with color pictures. A display of Caladium plants



placed near this collection will give your customers the idea. Collection consists of Fancy Leaved varieties. F.O.B. Florida. Be sure to state which size bulbs you want.

#### VARIETIES:

Fannie Munson Red Polka Poecile Anglais Candidum Dr. Groover Itacapus

No. 1 Sized Bulbs, 20 each of above 6 varieties (120 bulbs) ...\$22.00
No. 2 Sized Bulbs, 40 each of above 6 varieties (240 bulbs) ... 29.00
Jumbo Bulbs, 15 each of above 6 varieties (90 bulbs) ... 25.00



## BULBS FOR RETAIL SALES

#### LET US HELP YOU DO A BETTER SELLING JOB!

MILLIONS of bulbs are sold to home gardeners every fall and spring. If you aren't getting your share of this business, it's because you aren't trying! There's PROFIT AND QUICK TURNOVER in bulbs for you. Let us help you.

Our resale bulbs are packed either in individual boxes or in bulk. In

either event the shipping containers are designed as display cartons. All you have to do is open the box, set it up in a "high-traffic" spot in your store and you're in business. Color pictures are included in most of our collections to show your customers what they're buying. YOUR CUS-TOMERS WILL RESPOND TO THESE SELLING AIDS.



colorful packages of pop-bulbs will sell readily bulbs readily.

## HOLLAND BULB COLLECTIONS

PACKAGED - - - or - - - IN BULK

Bulbs packed in boxes with colored pictures and planting directions on each box. Packaged bulbs are the easiest way for you to sell bulbs-and the easiest for your customers, too. No wrapping or bagging necessary—no chance of getting bulbs mixed. Sold by the case only.

#### Bulb sizes are:

Tulips, size 11-12. Hyacinths, size 15-16. Daffodils, size DN No. 3. Crocus, size 7-8.

#### Each Case Contains:

- 5 boxes of white Tulips, 12 bulbs per box.
  5 boxes of yellow Tulips, 12 bulbs per box.
  5 boxes of pink Tulips, 12 bulbs per box.

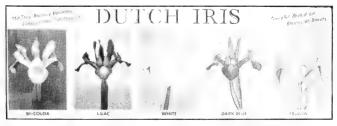
- 5 boxes of lavender Tulips, 12 bulbs per box.
- 10 boxes of red Tulips, 12 bulbs per box.
- 5 boxes of mixed Tulips, 12 bulbs per box.
- 12 boxes of mixed Hyacinths, 6 bulbs per box.
- 5 boxes of mixed Daffodils, 6 bulbs per box.
- 8 boxes of mixed Crocus, 24 bulbs per box.

Ball Packaged Bulb Collection (60 boxes) for \$36.00.

Early September delivery, F.O.B. West Chicago or East Coast if orders are received by July 15.

### IRIS (American-Grown)

Packed in display cases with colored banner in each pack. All 7-8 sized bulbs, 200 bulbs each of the following colors: Bicolor, Lilac, White, Dark Blue and Yellow. 1,000 bulbs, f.o.b. principal cities (see (1) below), \$30.00. Available early September.





#### **DAFFODILS Display Packed**

(American-Grown)

#### King Alfred

Golden yellow. Large colored banner included.

250 Bulbs DN No. 1 (95 lbs.) \$22.00 300 Bulbs DN No. 2 (60 lbs.) \$18.00

#### Mixed Daffodils

All colors and types. Large color banner included.

300 Bulbs DN No. 2 (60 lbs.) \$17.00

Varieties-50 bulbs each:

Actaea Fortune Sunshine Cheerfulness Flower Carpet 250 Bulbs DN No. 1 (90 lbs.) \$26.00

If you prefer to sell bulbs in bulk our Holland Bulb Collection is a real bargain! 1175 bulbs packed in paper bags with a colored picture of each variety and a large banner poster for window display. All named varieties and firstquality bulbs.

#### Each Ball Holland Bulb Collection contains:

HYACINTHS: (Size 15-16), 25 each, Blue, Pink and White.

DAFFODILS: (Size DN No. 2), 100 King Alfred.

TULIPS: (11-12 size).

- 100 Edith Eddy. Carmine-red, edged white.
- 100 Bartigon. Cochineal-red.
- 100 Philip Snowden. Deep rose.
- 100 Wm. Copeland. Lavender.
- 100 Carrara. Pure white.
- 100 All Bright. Bright red.



Posters and colored pictures of each variety help create sales.

- 100 Golden Harvest. Lemon-vellow.
- 100 Her Grace. Rose, edged white.
- 50 Blue Parrot. Dark lavender.
- 50 Fantasy. Deep salmon blotched green.
- 100 Red Emperor. The famous early, large fiery scarlet.

Ball Holland Bulb Collection (1175 bulbs) for \$51.00.

Shipped f.o.b. West Chicago or East Coast ports if your order is received by July 15.

Should any varieties be sold out when your order is received, we will substitute with equally good or better named varieties.

#### HOLLAND TULIPS Display Packed

Just raise the lid and your display is ready. Each box wrapped in cellophane. 80 lbs. Suggested retail price 59c to 69c.

#### Collection of Boxed Tulips.

#### Each case contains:

- 40 boxes Mixed
- 10 boxes Pink
- 15 boxes Yellow
- 20 boxes Red
- 10 boxes White 5 boxes Lavender

Case of 100 boxes (10 bulbs each), f.o.b. East Coast, \$38.00. F.O.B. West Chic-

ago, \$40.00.



Imported Holland Tulip Bulbs

Early September delivery. Orders must be received by July 1, 1959.

#### AMERICAN TULIPS Display Packed

100 each, size 12 up.

Flame Scotch Lassie Clara Butt Her Grace Fantasy Marjorie Bowen Bartigon **Eclipse** Dillenburg Golden Harvest

1000 Bulbs, 12 up, \$45.00.

Minimum order 1 case. Delivery early September, F.O.B. principal cities. (See (1) below).

(1) American-grown Daffodil, Tulip and Iris Collections shipped f.o.b. the following cities: Denver; Omaha; Kansas City, Kansas; Dallas; Minneapolis; Milwaukee; West Chicago; St. Louis; Atlanta; Jersey City; Detroit; Indianapolis; Cincinnati; Pittsburgh; Elmira; and Springfield, Mass.



#### Gladiolus **Posters**

Every back-yard gardener knows Glads and should buy bulbs. Are you selling them? Ball Gladiolus Collections consist of proven varieties and bulb sizes that will give your customer a good crop of flowers the first year. Bulbs are of the same quality and grade you buy for your own growing. Americangrown. Colored pictures of each variety supplied with each collection.

#### BALL GLADIOLUS COLLECTION No. 1

Contains No. 1 size bulbs (1½ in. up), 250 each of the following varieties:

Ethel Cave Cole. Fine pink.

Margaret Fulton. Salmon-pink.

Valeria. Light scarlet.

Elizabeth the Queen. Ruffled lavender.

Florence Nightingale, Tall white. Hopman's Glory. Tall yellow.

1500 No. 1 bulbs for \$37.50. F.O.B. West Chicago. Available January on.

vender.

BALL GLADIOLUS COLLECTION No. 2. Contains No. 2 size bulbs (11/4 to 11/2 in.), 250 each of the following varieties:

Sans Souci. Tall scarlet. Ethel Cave Cole. Fine pink. Rosa Van Lima. Rose-pink.

Margaret Fulton. Salmon-pink.

Valeria. Light scarlet.

Snow Princess. Tall white.

Elizabeth the Queen. Ruffled la-

Hopman's Glory. Tall vellow.

2000 No. 2 bulbs for \$39.00. F.O.B. West Chicago. Available January on.

#### **DAHLIAS**



The Ball Dahlia Collection is designed for the average "back-yard" gardener who wants some Dahlias in his planting. Tubers are packed individually in polyethylene bags. Collection consists of 25 tubers each of the following colors in large flowered varieties:

White Pink Red Autumn Shades Lavender

Shipping carton opens up into a display case and includes colored poster.

Ball Dahlia Collection of 150 tubers for \$30.00. F.O.B. Michigan. Available November on.

#### **BEGONIAS - GLOXINIAS**

For your more discriminating and "advanced-gardener" customers, Tell them to start them in peat moss and plant in 5- or 6-inch pots. Seventy degree temperatures are ideal. A Begonia and Gloxinia plant in flower placed with this collection will sell bulbs like the proverbial "hot cakes."

Ball Begonia Collection contains 200  $2-2\frac{1}{2}$  in. Belgian bulbs, 25 each: White, Orange, Scarlet, Yellow, Crimson, Salmon, Copper, and Rose-each variety packed in a separate bag. With each collection we supply an 8 x 20 in. colored window display



streamer (see picture), a cultural information sheet for your customers to read, a complete set of 5½ x 8½ in. colored pictures of all eight varieties, and three newspaper mats for advertising in your local newspaper. Ball Begonia Collection, shipped f.o.b. West Chicago from January on. 200 bulbs for \$34.50.

Begonia-Gloxinia Collection (Belgian-grown)

150 11/2 to 2 in, Assorted Tuberous Rooted Begonia Bulbs. 100 11/2 to 2 in. Assorted Gloxinia Bulbs.

250 bulbs for \$35.00.

F.O.B. West Chicago. Delivery January through March.

#### GLADIOLUS





Colored Posters included with each collection.

#### GARDEN LILIES

Increasing numbers of back-yard gardeners are planting Garden Lilies. They are becoming variety conscious. Are you selling them bulbs? Our Ball Lily Collections are designed to sharpen their interest and help you sell them.

BALL LILY COLLECTION No. 1 includes the "old stand-by" varieties, Color pictures of each variety in each case. Bulbs packed in peat moss. Contains 40 bulbs each of 7-8 Croft, the pure white trumpet Lily; 7-8 Rubrum, a reflex carmine-pink; 7-9 Auratum, the bowl-shaped flower, white spotted crimson with yellow stripes; and 6-8 Album, reflex white. Case of 160 bulbs, \$42.00. Shipped f.o.b. West Chicago, January to March

BALL LILY COLLECTION No. 2 also includes standard garden Lilies. Holland-grown, shipped f.o.b. New York and therefore of most interest to our eastern customers. Colored pictures of each variety in each case. Cases are designed as counter selling containers. Open case and use inside of cover for display of colored pictures. Wood partitions separate varieties. Contains 50 8-9 bulbs each of the following varieties:

Improved Regale Tigrinum Splendens Spec. Rubrum Magnificum Henryi Regale Album

Case of 250 bulbs, \$57.00. Shipped f.o.b. New York from November 1st on.

LILIES IN DISPLAY BOXES (Ball Lily Collection No. 3). Includes the newer American varieties that are finding wide acceptance among American gardeners. Bulbs are packed in peat moss and polyethylene bags, each variety in a separate bag. Attractive colored banner showing individual pictures with cultural directions included. Open the box, display the banner and you're in business!

Contains 25 bulbs each of the following varieties (American-grown):

Enchantment, 5-6 Fiesta, 5-6 Golden Chalice Hybrids, 5-6 Mid-Century Hybrids, 5-6 Olympic Hybrids, 6-7 Valencia, 5-6

Case of 150 bulbs f.o.b. West Chicago, \$40.00. Available October on.

#### PEONIES

BALL PEONY COLLECTION of 150 divisions, \$80.00.

Available Sept.-Oct. F.O.B. Illinois.

Our Peony Collection contains 25 good sized 3- to 5-eye divisions each of the following varieties:



Peony Poster

Baroness Schroeder. A late white.

Felix Crousse. A midseason brilliant red.

La Lorraine. A midseason creamy white.

Mons. Jules Elie. The standard early deep pink.

Richard Carvel. An early brilliant red.

Sarah Bernhardt. The standard late apple-blossom-pink.



## MISCELLANEOUS BULBS

#### CALLAS

An important cut flower and pot plant crop. For cutting, plant in benches in the fall in loose soil. Frequent watering and feeding and shade during the summer are important. Plant 2 ft. apart. Aethiopica forces best at 55° and Elliottiana and Rehmanni Superba at 60°. Use the yellow Elliottiana for Easter pot plants. Start bulbs in flats of peat moss at 60°. When root growth has started, pot in 5-or 6-inch pots, Force at 60° during growing period and 55° when flowering.

Elliottiana. The popular yellow Calla. (Pictured at left). November delivery.

	,	Per 100	Per 1000
13/4 to 2	in.	\$12.50	\$115.00
2 to $2\frac{1}{2}$	in.	16.00	150.00
$2\frac{1}{2}$ to 3	in.	33.00	315.00
3 in. up		47.50	465.00

Aethiopica. The popular large, white Calla, Delivery in August.

															F	er 100	Per 1000
$1\frac{1}{4}$	to	$1\frac{1}{2}$	in.						 						. :	\$10.00	\$ 90.00
$1\frac{1}{2}$	to	$1\frac{3}{4}$	in.						 				,			20.00	175.00
$1\frac{3}{4}$	to	2	in.						 		,					27.50	255.00
2	to	$2\frac{1}{2}$	in.						 							37.50	345.00

Rehmanni Superba. The pink Calla, November delivery.

																ı	'er 100	Pei	r 1000	
$1\frac{1}{4}$	to	$1\frac{1}{2}$	in.													. :	\$13.00	\$1	20.00	
$1\frac{1}{2}$	to	2	in.														16.00	1	40.00	
2	to	$2\frac{1}{2}$	in.					 									23.00	2	00.00	
$2\frac{1}{2}$	to	3	in.														30.00	2	65.00	
4.2				_		_	٠.			_		_	_					7		

Above prices f.o.b. West Chicago, F.O.B. California at the 1000 price.



#### **AMARYLLIS**

Our Amaryllis strain is one of the finest available. Your customers will appreciate the extra large flowers and brilliant colors.  $2\frac{1}{2}$  to  $2\frac{3}{4}$  in. bulbs usually produce only one flower spike, whereas the larger sizes will produce two, F.O.B. California.

						n, Red,
Scarle	t :	Shad	es	and V	ariegated	Shades.
				Per	Per	Per
				10	100	1000
$2\frac{1}{2}$	to	$2\frac{3}{4}$	in.	\$4.50	\$37.50	\$360.00
$2\frac{3}{4}$	10	3	in.	5.00	45.00	410.00
3	to	$3\frac{1}{4}$	in.	6.00	55.00	520.00
Mixtu	re	of a	Пс	olors.		
$2^{1/_{2}}$	to	$2\frac{3}{4}$	in.	3.25	27.50	250.00
$2\frac{3}{4}$	to	3	in.	3.85	33.00	300.00
3	to	$3\frac{1}{4}$	in.	5.00	44.00	410.00

#### ANEMONE

West Coast grown.

Monarch de Caen. Single Poppy ty	oe. Mixed.	
½ to 5/8	in. 5/8 to 3/4 in.	3/4 to 7/8 in.
Per 100\$ 2.0	\$ 4.00	\$ 6.00
Per 1000 11.0	30.00	48.00
St. Brigid. Double mix.	The Bride. Single	pure white.
Blue Poppy. Single bright blue.	Rosea (Sylphide), S	single fuchsia-
His Excellency. Single scarlet.	rose.  Lord Lieutenant. D	ouble blue
The Admiral. Double rose.	The Governor. Dou	
Prices on above varieties:		

 Per 100
 \$2.50
 \$4.50
 \$6.00

 Per 1000
 \$1.00
 \$4.50
 \$6.00

 Per 1000
 \$1.00
 \$3.00
 48.00

 Shipped f.o.b. California or West Chicago. Minimum order, 100 bulbs

per variety and size. Bulbs available in September.

#### **PEONIES**

Our Peonies come from one of the country's leading specialists. Delivery in September, f.o.b. Illinois. Starred (\*) varieties are the preferred kinds for cutting.

24/144	D 10	D 100
WHITE	Per 10	Per 100
Auten's Pride	6.50	\$100.00 55.00
*Baroness Schroeder (Late), White		
*Elsa Sass (Late). White	17.50 6.50	150.00 55.00
Festiva Maxima (Early). White, red center	7.50	65.00
Frankie Curtis (Midseason), White	10.00	90.00
*La Lorraine (Midseason). Cream-white	7.50	65.00
LeCygne (Early). Milk-white	17.50	150.00
Mattie La Fuze. White tinted pink	12.50	100.00
Nick Shaylor	18.00	160.00
, , , , , , , , , , , , , , , , , , , ,	10.00	100.00
YELLOW		
Laura Dessert (Midseason), Yellow	12.50	100.00
RED		
*Augustin D'Hour (Midseason). Red	7.00	60.00
Big Ben	25.00	200.00
*Felix Crousse (Midseason). Brilliant red	6.50	55.00
Inspector LaVergne (Midseason). Red	6.50	55.00
Karl Rosenfield (Midseason). Dark red	7.50	65.00
King Midas	10.00	90.00
Onondaga (Midseason). Red	12.50	100.00
Philippe Rivoire	15.00	135.00
*Richard Carvel (Early), Brilliant red	7.50	65.00
PINK		
*Alice Reed Bates (Midseason), Medium pink	15.00	125.00
Blanche King	16.00	150.00
James Pillow	16.00	150.00
*Lady Kate (Late). Orchid-pink	7.50	65.00
Martha Bulloch (Midseason). Rose-pink	7.50	65.00
Minuet (Late), Pink	15.00	125.00
*Mons. Jules Elie (Early). Deep pink	7.00	60.00
*Mrs. F. D. Roosevelt (Midseason). Shell-pink	22.50	200.00
*Sarah Bernhardt (Late). Apple-blossom-pink	7.00	60.00
Walter Faxon (Midseason), Salmon-pink	9.50	80.00





## MISCELLANEOUS BULBS Continued

#### FREESIAS

TECOLOTE HYBRIDS. Flowers of immense size, wide open and delightfully fragrant. Plants of unusual strength and vigor with tall, strong stems. Much superior to standard commercial varieties.

Marie. (Pat. 609). Largest, earliest and most beautiful of all white Freesias.

Talisman. (Pat. 555). Bright salmon-pink with rich cream throat. Early.

White	Red	Pink
Yellow	Lavender	Orange
Rose	Blue	Mixture

OTHER GIANT HYBRIDS

Mammoth White. Giant large, pure white flowers. Very early.

Mammoth Yellow. Giant golden yellow. Very early.

Judy Double Yellow. Large double yellow.

Flo. Large deep blue.

Elder's Golden Giant. Large bright golden vellow.

Oriole. Fine deep golden orange. Earliest to flower.

Sunset. Golden orange.

Rainbow Mixture. Mixture of all colors.

5/8	to	5/8 3/4 uj	in.																								. :	\$2	2. 3.	50 50		\$	17 27	000 00. 00.	0	
		. C						es	t	C	h	ic	aę	go	١.	N	Ίi	n	in	aı	ır	n	(	r	d	eı	10	00	) ]	bul	bs.	 Av	aila	able	е	

Golden Yellow



#### RANUNCULUS

Our Ranunculus are all of the Tecolote Giant strain. We consider this the outstanding strain for its large double flow-

Sunset (orange

Pink Shades Rose Shades			
Light Yellow	Shades	White	
Prices on all			Per 1000
5% to 34 in.			
3/4 to 7/8 in.			
7/8 to 1 in			
1 in. up			80.00
Mixture of al	labove	colors.	
5/8 to 3/4 in.		. 3.50	24.00
3/4 to 7/8 in.			33.00
7/8 to 1 in		6.00	50.00
1 in. up			75.00

Shipped f.o.b. California or West Chicago. Minimum order 100 per variety and size. Available September to February.

### IMPORTED FRENCH BULBS

French-grown bulbs available in August and September. F.O.B. West Chicago.

NAKCISSUS		
Paper-Whites	Per 100	Per 1000
Size		
13-14 cm. (1,250 bulbs per case)	\$7.50	\$65.00
14-15 cm. (1,000 bulbs per case)	. 9.00	80.00
Grand Soleil d'Or. (American-grown). The Yellow Pap		Bulbs for
Carry 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Minim	um order
September delivery. F.O.B. California or West Chicag	go. Mimim	um order,
100 bulbs,		
Size	Per 100	Per 1000
12-14 cm. (600 bulbs per case)	\$6.00	\$45.00
14-16 cm. (400 bulbs per case)	7.00	60.00
14-16 cm. (400 bulbs per case)	0.00	75.00
16-18 cm. (250 bulbs per case)	9.00	75.00
LILIUM CANDIDUM (Madonna	( )	
	Per 100	Per Case
		\$58.00
22-24 cm. 8-9 300 per case	\$20.00	
24-26 cm, 9-10 250 per case	24.00	58.00
26-28 cm. 10-11 180 per case	28.00	50.00
FRENCH ROMAN HYACINTH		
Size Bulbs	Per 100	Per case
13-14 White 1500 per case	.\$14.00	\$120.00
13-14 Blue 1500 per case	9.00	80.00
13-14 Blue 1500 per case	14.00	120.00
13-14 Light pink 1000 per case	. 14.00	120.00

#### CANNAS

Our Cannas are high quality 2- to 5-eye divisions. Delivery from January through spring months. F.O.B. West Chicago.

#### PINK-GREEN FOLIAGE

Copper Giant. Large salmon-pink. Tall.

City of Portland, Large pink, Medi-

Hungaria. Large dark pink flower. Dwarf.

Rosamond Cole. Extra large red flower, gold edge. Dwarf.

#### RED-GREEN FOLIAGE

President. Extraordinarily large, bright red. Dwarf.

#### RED-BRONZE FOLIAGE

Ambassador. Cherry-red. Dwarf. Red King Humbert. Large, light red flower. Tall.

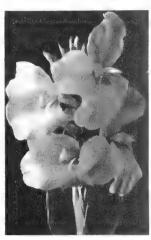
#### YELLOW-GREEN FOLIAGE

Richard Wallace. Large yellow. Yellow King Humbert. Large, yellow variegated.

#### ORANGE-BRONZE FOLIAGE

Wyoming. Large dark orange.

Prices above Cannas, each: \$6.50 per 100; \$60.00 per 1000. 250 at 1000 rate. Minimum order 100, 50 of a variety.



#### **CROCUS**

For forcing for late January flowering, pot bulbs early October and store cool (a 50° bulb cellar is fine) until root action is well started—10 to 12 weeks is usually required. Force in 55° with shade until flowers begin to show color. 3 to 4 weeks forcing is usually required in December and January with less time later in the season.

Holland-grown. Shipped (in combination with other Holland bulbs) f.o.b. ports of entry on East Coast, South Coast, West Coast or Great Lakes. F.O.B. West Chicago for smaller or separate shipments. September

denvery.	8-9	9-10	10-11
	Per 1000	Per 1000	Per 1000
Niggerboy. Darkest purple	. \$17.00	\$20.00	\$25.00
Purpurea Grandiflora. Purple	. 17.00	20.00	25.00
Queen of the Blue. Porcelain-blue .	. 17.00	20.00	25.00
Remembrance. Dark blue	. 17.00	20.00	25.00
Striped Beauty. Blue striped white .	. 17.00	20.00	22.00
Sir Walter Scott. White striped purpl	e 17.00	20.00	22.00
Kathleen Parlow. Large pure white	e.		
Early	. 22.00	29.00	35.00
Snow Storm. Large pure white	. 22.00	29.00	35.00
Yellow Mammoth. Deep yellow	. 17.00	19.00	22.00
Minimum order, 1000 bulbs of any va	ariety and	size.	

#### MUSCARI (Grape Hyacinth)

Holland-grown. Shipped (in combination with other Holland bulbs) f.o.b. ports of entry on East Coast, South Coast, West Coast or Great Lakes, F.O.B. West Chicago for smaller or separate shipments. September delivery. 8-9 9-10

Per 1000 Per 1000 Armeniacum. Bright blue ......\$12.50 \$15.00 Minimum order, 100 bulbs of any variety and size,

#### SCILLA SIBIRICA

(Siberian Squill)

Holland-grown. Shipped (in combination with other Hollan f.o.b. ports of entry on East Coast, South Coast, West Coast Lakes, F.O.B. West Chicago for smaller or separate shipments.	or Great
delivery. 1st Size Per 1000	
Spring Beauty. Large, early bright blue\$35.00	\$44.00
Sky Blue	22.00
Alba, White	25.00

## MUMS — a Bedding Plant, Too!

Use of Mums—garden or hardies mostly—as a spring bedding plant has more than doubled the past three years! They are fast becoming a major item on the spring plant list. Main reasons: they are easy to grow, and they are at their best in autumn when most other garden subjects are "over the hill." Here are the ways they are used:

#### Garden Mums in flower in 3's for spring

Here's an unusual, showy, yet easy to grow item for your spring trade! A single cutting (garden variety) is potted to a three-inch pot February 26, pinched March 5, and grown at 60° nights. No shade, no lights—and they'll be nicely in flower by early May! They make colorful, highly salable plants—especially in the bright new plastic pots. They are a low cost item (some growers offer them for 39c cash and carry). Best of all, after your customer has enjoyed the flowers on them for a couple of weeks, the plant can be cut back, planted out to his garden—and it will flower again in the fall. Some growers attach little tags to them, pointing out their use for fall flowering and giving brief instructions (cut back half way down, plant out, water, feed, pinch till August 1, etc.). Quite a few of these Garden Mums in spring are flowered in larger pot sizes too—4-5- and even some 6-inch.

The schedule described above will flower most varieties in early May (many for Mother's Day).

Garden varieties may be potted as early as mid-February and as late as mid-March—no shade, no lights. They flower 8 to 10 weeks after potting,

Spring garden Mums can be brought in for a certain date (Easter, Mother's Day, Decoration Day), by use of lights, then black cloth shade. Schedules to flower the late September-early October garden kinds follow:

-	_	_	^
- 1	9	5	9

Easter (Mar. 29)	Plant Jan. 15	Light Jan. 15-21	Shade Mar, 15	Pinch Feb. 5
Mother's Day (May 10)	Feb. 26	Feb. 26-Mar. 4	Mar. 15	Mar. 19
Decoration Day (May 30)	Mar. 19	Mar. 19-25	Mar. 26	April 9

#### 1960

Easter (April 17)	Plant Feb. 4	Light Feb. 4-10	Shade Mar. 15	Pinch Feb. 25
Mother's Day (May 8)	Feb. 25	Feb. 25-Mar. 2	Mar. 15	Mar. 17
Decoration Day (May 30)	Mar. 17	Mar. 17-23	Mar. 24	April 7

#### Garden Mums-flatted or potted for spring sales

The most important single use made of Garden Mums for spring sales. They may be handled several different ways: **As potted plants**—cuttings are potted to  $2\frac{1}{4}$ - or better to 3-inch Jiffy-Pots in early April, pinched soft in  $2\cdot 3$  weeks, are ready for sales as bushy, well developed plants for late May. Same watering, feeding, etc., as annuals. No light or shade. Night temperatures of  $50^\circ$ , or better yet  $45^\circ$  (and cool days), retard the tendency toward premature buds. Lighting the plants 3 hours per night will also help avoid buds.

More and more growers are shifting over to use of newer growing containers for spring garden Mums. The Jiffy-Pots (see page 108) are ideally suited for this.

Some growers handle them in regular Market-Paks—at less cost by the way!

#### Pot Mums used in combination

Mums are coming into quite general use for combination boxes. They add bright colors and lots of them, they are compact growing, they stand transplanting well both into the combination box and later to the customer's garden. Garden varieties, used in this fashion, flower again in the fall for the customer.

Many florists use garden Mums—schedules, etc., on this page. Greenhouse varieties are also used—grown on regular schedules (See the Ball Mum Guide). Flowers are larger and showier, but if planted out in the customer's vard they flower after frost date in most sections.

Three fine Garden Mums: Ostosa, large white incurved pompon; Lipstick, ruby-orange cushion type; and King's Ransom, golden yellow decorative, are included in our Sweet Sixteen Collection offered on the opposite page.



## Garden Mums set out in May for fall sales

Here's a really low cost way to turn some dollars out of that patch of unused land around your place.

Rooted cuttings are simply planted outdoors soon as frost danger is past. They will develop better if they are given a square foot or more per plant. They should be generously fed and watered through the growing season. Pinching must be tended regularly up till July 25—or even August 1 on the mid-October or later kinds. No shade or light.

They'll start showing color in late summer. They can be dug and potted to 6-inch pots, or to a Bird Perennial Pot.



A nice block of Garden Mums in 6-inch cans for fall sale in flower. Photo at Hills Nursery, Dundee, Ill., world-famous for evergreens. Jack Hill has done some interesting pioneering in use of peat-sand mixtures (U.C. Mix) in container growing of nursery stock. In the photo. left to right, Messrs. Costa and Fisher.



Three-inch spring Garden Mums at Molesta's, Grand Rapids, Michigan. John Molesta shown above. The Molestas make something of a specialty of these 3-inch spring Mums. They are potted one cutting to a 3-inch pot about March 2,  $60^\circ$ , but no shade and no lights for the plant shown above—in flower early May.

Sixteen

- now!

## -Sweet Sixteen Garden Mums

Reaction to our Sweet Sixteen promotion of Petunias and other Annuals has been so favorable that we have enlarged our program to give you SWEET SIXTEEN GARDEN MUMS.

These sixteen varieties have been carefully selected for you from among the hundreds of garden varieties available. Each one is tops in its class. The collection contains a well balanced assortment of all Chrysanthemum colors and forms.

## What Sweet Sixteen Garden Mums will do for you:

1. Sweet Sixteen Garden Mums will extend your present line of bedding plants. By offering your customers Sweet Sixteen Mums as a spring bedding plant item, they will have flowers in bloom long after other annual plants have finished flowering; it will add beauty to their gardens later into the fall.

2. Sweet Sixteen Mums offer your customers a balanced assortment of colors and forms. Artistic white and yellow spoon types (Jessamine Williams); garden types with lots of color (King's Ransom, Joybringer); compact, showy Cushion Mums (Lipstick, Mahogany Cushion); and short, compact Daisy Mums (Mischief).

3. The Sweet Sixteen Mum Collection will eliminate guesswork for you as a bedding plant grower who may not be familiar with garden Mums. Outstanding varieties can be offered to your spring bedding plant trade with the knowledge that you have provided your customers with the best.

#### SWEET SIXTEEN GARDEN MUM COLLECTION

All the following varieties are suitable for flowering in May in pots (see page 98).

Each Collection contains 25 rooted cuttings each of the following 16 varieties.

#### GARDEN TYPES

Medium tall, bushy, lots of color.

Ostosa. Excellent white, very free flowering.

Yel. Chris. Columbus. Lemon-yellow, decorative.

King's Ransom. Golden yellow decorative. Large, showy blossoms.

Joybringer. Salmon-rose pompon.

**Spellbound.** Very pleasing lavender-pink, decorative pompon.

Remembrance. Carmine-red pompon.

#### **CUSHION MUMS**

Compact, "mound" shaped plants.

Powderpuff. White.

Yellow Supreme. (H). Bright lemon-yellow.

Yellow Cushion. Light yellow decorative.

Major Cushion. Small decorative lavender pompon.

Mahogany Cushion. Jasper-red.

Lipstick. Ruby-orange.

#### SPOON TYPES

Tubular petals opening at tips to form a spoon.

Jessamine Williams. Early, free flowering white.

Yellow Spoon. Showy and artistic light yellow single.

#### DAISY

Short, compact, Daisy-like flowers.

Lyric. Attractive white.

**Mischief.** Dark purple with contrasting yellow center.

### 400 Rooted Cuttings (Sweet Sixteen Collection only), \$35.00

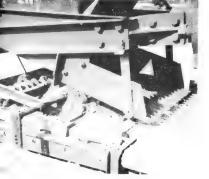
Collections available February 15 to June 15. Be sure to state desired shipping date. In the event that any variety is sold out at shipping time, substitution will be made by our supplier with a variety of the same color and type.

Grog Ball

## Growing Better Bedding Plants

#### GERMINATION

These are some essentials: (1) Constant uniform moisture; (2) correct temperature—65 to 70° minimum for most annuals; (3) sterile soil and containers (a combination of steam plus a Panogen drench is hard to beat); (4) loose, fine medium, not too rich; and (5) good seed.



Close-up of flat filler at American Plant Growers, Inc., Lomita, Calif. This type of operation is becoming quite widespread.

#### SEED TROUBLES?

Damp-off is much easier prevented than cured. First, we suggest following the five germination essentials listed above. Not that every grower must operate the same. Good growers have many germination systems, but they all carry out the same essentials.

After germination, damp-off can be restricted by: (1) careful watering—water thoroughly but not too frequently; (2) plenty of light and air as soon as the seed is up; (3) temperature lowered to growing range—50° for most annuals—by transplanting time.

#### **GENERAL CULTURE**

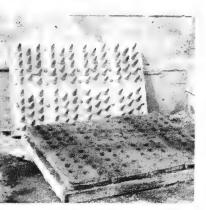
Soil. A good bedding plant soil is regular field soil with about 25% organic matter mixed in. Peat, manure, and leaf mold all work well—and so do Perlite (not organic but a good loosener), redwood shavings, peanut hulls and other additivies. Steam sterilizing pays for itself just by killing weed seeds, but also controls many diseases.

Transplanting. "Early and shallow" is our rule of thumb. We feel that when the first true leaves show it's time to prick off—plants take off faster and damp-off danger is reduced. Shallow planting may look strange on lanky seedlings, but they soon right themselves and take off. Deep planting does seem to encourage stem rot.

Water and fertilizer. If flats, paks or pots are set level, one thorough watering will hold them for several days. You may need to touch up high spots and edges, but we like to let the whole planting dry quite thoroughly before the next thorough watering.

Feeding usually isn't needed until late in the season, but in the rush of business it is often neglected. One or two applications of complete liquid fertilizer will keep the average bedding plant crop looking much better.

Timing varies with varieties. However, ten weeks from seed sowing to salable plants has been roughly average during our normal northern spring, germination at 70° and growth at 50°. Cold frames held below 50° can cause several additional weeks delay. Southern heat, or late sowings in the North, on the other hand, will bring plants on faster.



Here's a one-stroke dibbler that prepares an entire flat of Market-Paks for the seedlings.

Thin layer of coarse straw under the "paks"

is one of the best ways to keep clean and dry. Other good systems: sheets, boards, gravel, bare bench.



Art Thomas, L. I. bedding plant grower, originated the idea of covering all seed flats with tubes of Polyethylene until germination, is sold on the practice for moisture retention (Plasticover, see page 46).



Some frame installations have mechanized ventilation like this one at Richardson's in St. Elmo, III. A good many frames are now covered with plastic, not glass.

Plastic houses like this one are used by hundreds of growers to increase spring growing area. This one is covered with Polyethylene. For year round plastic houses, use "Weatherable Mylar," page 111.

Intermittent mist. Here's a setup where with two time clocks and a solenoid valve we can keep germinating seed uniformly moist. Five seconds of mist every 10-30 minutes, depending on season and weather.





## New Ideas for Selling Bedding Plants

Looking for new ideas to get your bedding plant business off to a good selling season this spring? Here are a few we garnered from our own experience and that of some of the growers we visited last season.

- 1. Self-Service is the basis of a good bedding plant sales plan. Grower after grower reported that this is the one thing that enabled him to increase his sales and profits without increasing his costs for additional salespeople. In most cases, growers reported that fewer salespeople were able to handle a greatly increased volume of business through self-service.
- 2. Garden Center layout is important. Study traffic movement through your sales area. Do customers by-pass certain sections? If so, rearrange the aisles. Is there a "hot spot" where sales are exceptional? Take full advantage of it with "specials."

Get plants up off the ground where people can see them and reach them. Everything from a simple wood frame to an elaborate aluminum rack (pictured at right) has been successfully tried.

Provide carts for shopping ease. The one pictured below can be made from a supermarket cart, or you can use childrens' wagons, or custom-built ones may be provided. Free parking is essential. A large lot in the front, near the street, seems to be better than parking at the rear—but free, off-the-street parking is a "must."

- 3. Study your sales package. The old method of digging a dozen or two plants from a greenhouse flat is outmoded by the newer growing-selling containers now being used by the progressive bedding plant grower.
  - "By-the-dozen" containers are ideal, such as Market-Paks (pictured below filled with Petunia plants ready for sale) and the new Plastic Plant-Pak (see page 103).

    Jiffy-Pots make ideal growing-selling containers for single plant sales of vegetables (see Tomato plant below) or other bedding plants, where your trade demands higher quality plants and earlier results.
- 4. Select your varieties with care. While some of the most popular varieties of bedding plants continue to head the list each year, such as Spry Marigold, the progressive grower will be on the alert for exceptional new varieties to add sparkle to his offerings. All-America award winners have a ready market as a result of concentrated publicity in garden magazines. Visit trial gardens and study your seed catalogs for something new to offer your customers.
- 5. Good quality stock—the basis for all good sales. Clean, healthy plants are effective promotion in themselves, and the grower who offers superior quality is the one who profits most.
- 6. Do an effective job of merchandising. Your job is only half done when you produce the plants. Selling them is an art, too.

Use signs. First, a good one near the road to catch attention. More inside, to help folks find their way around.

Advertise. One or two weeks before the season starts is about right. Direct mailings (such as the Sweet Sixteen Booklet pictured at right) and newspaper ads featuring a few special items have good pulling power.

Use posters and attractive labels to clinch the sale. New, inexpensive, full color plastic picture labels (at right and in the Petunia "pak" below) show the variety in full bloom, help to sell plants when they are ready for planting out, before coming into flower (page 2).

Work through your garden clubs and the garden editors of your local newspapers. A little enthusiasm shown on their behalf will generate a lot of good public relations which will return to you in the form of sales. This is the kind of advertising you cannot buy—you must earn. But it is sometimes the most effective.



Mr. and Mrs. Aldridge of Aldridge's Garden Shop, Birmingham, Ala., in their bedding plant sales area. A careful study of the photograph serves to illustrate the points mentioned at left. Here is self-service in a most convenient form. Attractive aluminum racks hold Market-Paks of well grown, plainly labeled (and priced) Petunias, topped with a colorful poster which serves as a "salesman" for the plants below. The Aldridges have increased sales from 300 to 500%, largely by the use of a self-service layout and modern growing-selling containers.

Sweet Sixteen Booklet (left) and Picture Label—two useful aids to increase bedding plant sales.



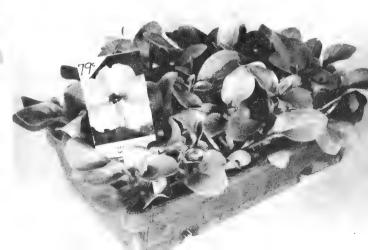
Carts like that pictured below make self-service buying of bedding plants easy. Wagons can also be used.



Jiffy-Potted Tomato plants such as the one pictured below find a ready market. Your customers will like the quick "take-off"—earlier



Petunias and other annuals, grown in Market-Paks, are convenient to handle, make self-service practical. Growers find individual sales increase due to the possibility of a wider selection of smaller units.



# MERCHANDISING AIDS To Help You Sell More Plants



#### PLANT DISPLAY RACK

- Displays three times as much merchandise in the same area as old-style ground or bench selling.
- Shelves can be adjusted to lie flat or slanted downward for better display.
- The two wheels make the rack easily portable—it rolls like a wheelbarrow.
- On top is a special holder for your Ball Sweet Sixteen posters.
- Also used to display pot plants, dish gardens, etc.
- Folds absolutely flat in one piece in less than a minute for easy storing,

#### Specifications:

Over-all length 39 inches

Top shelf 46 inches high, others 12 inches apart; extra 4-inch space between bottom two shelves.

Top two shelves 11 inches front to back. Bottom two shelves 16 inches front to back.

1 to 9 racks, \$23.95 each; 10 or more racks, \$22.95 each.

Shipping weight, 50 lbs., F.O.B. West Chicago, Ill.

## MOLESTA PLANT CARRIER

Sells More Plants in Less Time

This handy carrier for six small potted plants fills a long-felt need by the florist. The Molesta Plant Carrier can be used for all types of pots—clay, plastic, aluminum or Jiffy-Pots. The 2-inch pot size will accommodate either 2-inch or  $2\frac{1}{4}$ -



inch pots. The 3-inch pot size accommodates the one size only. Made of sturdy tan cardboard with the inner surface varnished to resist damage by moisture.

#### **PRICES**

2-Inch Per 1000	3-inch Per 1000
200-800 (200 for \$8.80)\$44.00	100-900 (100 for \$7.70)\$77.00
1,000-4,800	1,000-4,900 72.00
5,000 up	5,000 up 69.00
Packed 200 per case, shipping	Packed 100 per case, shipping

weight 35 lbs. Minimum order 200. weight 38 lbs. Minimum order 100.

Prices Net, F.O.B. West Chicago, Ill.

# WELL PREPARED SOIL MEANS Well Produced Plants

Nothing is more important in obtaining good seed germination and in growing good plants in flats, paks and pots than a soil of the proper ingredients, well mixed and of the right texture. For breaking up the heavy field soil and pulverizing manure, a good **Soil Shredder** is invalu-

able. Complete mixing of the various ingredients can be accomplished. To obtain a nice fine soil for seed flats or pots, the new **Krieger Soil Screener** is a great time-saver over the old-fashioned hand screen.

#### KRIEGER SOIL SCREENER

- Fluffs, mixes and aerates soil for potting.
- Screens out trash and stones.
- Does not remove valuable humus—leaves soil in best possible condition.
- Screens as fast as you can shovel.
- Eliminates the back-breaking, time consuming job of hand screening.
- So completely safe, a child can operate it.
- Light in weight—can be easily wheeled or lifted to where the job is to be done.
- Makes seeding and transplanting a pleasure.

#### SPECIFICATIONS

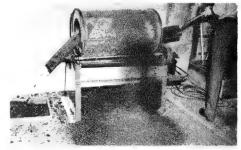
Capacity: About 60 bushels an hour.

Over-all Size: 60 in. long, 24 in. wide, 45 in. high.

Construction: Frame of heavy steel plate, galvanized mesh drum lifts off for easy moving. Metal chute channels out trash and stones. Ball bearings. Driven by ¼ H.P., 110 volt motor.

#### **PRICES**

Without Motor \$135.00
With ½ H.P. Motor 175.00
Shipping weight about 100 lbs. F.O.B. Mason
City. Iowa.



Trash and stones are ejected at the left, while the sifted soil, well mixed with compost, falls into a pile alongside the machine.

#### LINDIG SOIL SHREDDERS — A Size and Model for Every Job

Designed to give fast, thorough, and complete shredding of soil, manure, peat, compost, etc. Equipped with free-swinging ACTIONIZED SHRED-DING BLADES of ALLOY STEEL, mounted on heavy steel rotors. The upper stationary blades are individually mounted with a spring controlling each blade, giving close control over the shredded material as it allows only the required opening to be made for a non-crushable object to pass through the shredder. The body and hopper are fabricated of

heavy gauge sheet steel. The discharge door is adjustable and can be regulated to control

the flow of material as it leaves the shredder.

MODELS JR-B 1B-4 1B-6 2B-6 2B-8 B-24 29" Height 36" 36" 36" 36" 48" 46" Length 38" 46" 46" 46" 48" Width at wheels 15" 181/2" 181/2" 201/2" 41" 201/2" Feeding Hopper 15½″x14 16"x18" 16"x18" 18″x20″ 8"x20" 20"x25" Rotor Width 81/2" 81/2" 101/2" 101/2" 22" No. of Shredding Hammers 15 16 24 24 32 48 No. of Upper Pivoting Blades 4 3 5 5 13 Capacity per hr. 3 yds. 8 yds. 8 yds. 14 yds. 14 yds. 25 yds. Wt., less power 90 lbs 155 lbs. 165 lbs. 170 lbs 180 lbs 880 lbs.

**SPECIFICATIONS** 



	PRICES: Less Power	\$110.00	\$145.00	\$155.00		\$185.00	\$550.00
'	With ½ H.P. Elec, Motor						
	With ¾ H.P. Elec. Motor		220.00	230.00	250.00		
	With 1 H.P. Elec. Motor				272.00	282.00	
	With 1½ H.P. Gas Engine and Clutch	160.00					
	With 2 H.P. Gas Engine and Clutch		215.00	225.00	245.00	255.00	
	With 15 H.P. Gas Engine, Clutch and Manual Starter						965.00
	With 15 H.P. Gas Engine, Clutch and Elec. Starter						1090.00
	AND A DOMESTIC PROPERTY.			erneru i			

All prices net, f.o.b. St. Paul, Minn, SEND FOR DETAILED CIRCULAR.

#### NEW BALL INTRODUCTION!

## Plastic Plant-Paks

A new plant container designed to hold a dozen plants, made of plastic-strong but light. Plant-Paks are lightly fastened together at the corners to form units of 6 or 8 so that they may be dropped readily into a flat, thus filling the flat completely with paks in one handling. Save time and labor.

When ready for sale, Plant-Paks are very easily separated from one another by a slight pull.

An attractive gray in color, Plant-Paks are clean to handle -mold cannot form on them. They support good, uniform plant growth--do not absorb nutrients from the soil. Nine 1/4 in. holes in ribbed bottom provide good drainage.

#### SIZE-DESCRIPTION

- Unit of 6 Paks joined to measure 20%" x 10%" x 2%" deep. Individual paks measure 5" x  $6\frac{1}{2}$ " inside top. Model A-6
- Model A-8 Unit of 8 Paks joined to measure 20\%" x 10\%" x 2\%' deep. Individual paks measure 43/4" x 5" inside top.
- Unit of 6 Paks joined to measure  $15\frac{3}{4}$ " x  $13\frac{1}{4}$ " x  $2\frac{3}{4}$ " Model B-6 deep. Fits into standard Tomato or Grape lug. Individual paks measure 6\\ " x 4\%" inside top.



	PRICES	Per 1000	Units
	Δ	-6 or A-8	B-6
100	Units (600 Paks A-6 or B-6; 800 A-8)	\$260.00	\$286.00
	(100 Units A-6 or A-8 for \$26.00)		,
	(100 Units B-6 for \$28.60)		
1000	Units (6000 Paks A-6 or B-6; 8000 A-8)	240.00	264.00
	Units (30,000 Paks A-6 or B-6; 40,000 A-8)	220.00	242.00

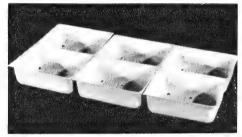
Minimum order 100 units. Prices prepaid east of the Rockies at above prices. Will be prepaid west of the Rockies in the continental U.S.A., excluding Alaska, at \$10.00 per 1000 units additional.

Shipping weight per case of 100 units ...... 29 lbs.

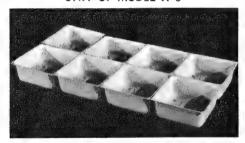
#### UNIT OF MODEL B-6



#### UNIT OF MODEL A-6



#### UNIT OF MODEL A-8



## Alumipaks\*





Sparkling, eye-catching containers for growing and selling bedding plants -both annuals and vegetables. Strong and durable.

Three sizes available:

No. 804.  $4\frac{1}{4} \times 8\frac{1}{4} \times 2$  inches deep. No. 808.  $8\frac{1}{2} \times 4\frac{1}{2} \times 2\frac{1}{4}$  inches deep. No. 711.  $5\frac{1}{2} \times 7\frac{1}{2} \times 2\frac{3}{8}$  inches deep.

	P	rice per 100	0
	No. 804	No. 808	No. 711
1000-4000	.\$48.50	\$49.80	\$53.00
5000-9000		49.80	51.50
10,000-24,000	. 45.20	46.40	50.50
25,000-49,000		43.10	49.50
50,000 Up		39.80	48.00

Prices net, prepaid from factory on 200 lbs. or over; otherwise, F.O.B. West Chicago, III. Allow 4-5 weeks on prepaid shipments. Packed 1000 per case. Minimum order 1000.

Weight: No. 804, 34 lbs. per case; No. 808, 42 lbs. per case; No. 711, 50 lbs. per case.
\*Trademark Reynolds Metals Co.
SEND FOR FREE SAMPLES

## M-Scope

### MOISTURE **COMPARATOR**



A new instrument for measuring and comparing soil moisture. Consists of a round gauge with a 9-inch stem. Electrical current gives moisture readings on a scale at various depths as the stem is pushed into the soil. A comparison of readings at different times establishes the point at which soils need to be watered. Operated by a dry cell that needs replacement every year or two. Easy to operate-easy to read-easy to carry.

#### PRICE

Postpaid, each .....\$12.00







## MARKET-PAKS

# Now Available in 5 Popular Sizes

No. 24.  $4\frac{1}{8} \times 5\frac{3}{4} \times 2\frac{1}{2}$  inches. A budget-size package suitable for a dozen upright annuals such as Marigolds or Zinnias spaced close or  $\frac{1}{2}$  dozen spreading plants such as Petunias or Pansies. This size is well adapted to areas and markets where younger plants are sold.

**No. 28.**  $5\frac{1}{8}$  x  $5\frac{1}{2}$  x  $2\frac{3}{4}$  inches. Also a budget-size pack suitable for a dozen plants, but allowing a little wider spacing than No. 24. Fit 8 to a flat  $11 \times 20\frac{1}{2}$  inches, inside diameter.

**No. 30.**  $3 \times 10^{1/4} \times 2^{3/8}$  inches deep. A special new design for 12 or 14 plants set in a double row. Fits 7 paks to a flat  $10^{1/2} \times 20^{1/2}$  inches, inside diameter.

No. 42.  $5\frac{1}{2} \times 7\frac{1}{2} \times 2\frac{3}{8}$  inches. This original Market-Pak has been used successfully by thousands of bedding plant growers as the standard unit of sale for a dozen well grown plants.

No. 60. 6 x 10 x 25% inches. Suitable for one or two dozen plants, depending on type and size or quality desired.

We will be glad to send you samples of any sizes on request.





No. 28

No. 30





#### MARKET-PAK PRICES PREPAID on 150 lbs. or More East of the Rocky Mountains Only

No. 24.  $4\frac{1}{8}$  x  $5\frac{3}{4}$  x  $2\frac{1}{2}$  in. deep. Packed 250 per case—17 lbs. per case. Minimum order 250.

Quantity	Price per 100
250-750	\$32.00
1,000-9,750	29.00
10,000-49,750	27.00
50,000 up	25.00

No. 28.  $5\frac{1}{8}$  x  $5\frac{1}{2}$  x  $2\frac{3}{4}$  in. deep. Packed 250 per case—23 lbs. per case. Minimum order 250.

Quanti	ty					ł	'n	ice	e per 10	0
250-750	Έ.							. \$	43.00	
1,000-9	,750	)							39.00	
10,000-	49,7	50	)						36.00	
50,000	up						٠		33.00	

No. 30.  $3 \times 10\frac{1}{4} \times 2\frac{3}{8}$  in. deep. Packed 200 per case—17 lbs. per case. Minimum order 200.

Quanti	ty				1	Pr	rice per 100
200-800	٠.						. \$48.00
1,000-9,	800						. 43.00
10,000-	49,80	0					. 40.00
50,000	up						. 37.00

No. 42.  $5\frac{1}{2}$  x  $7\frac{1}{2}$  x  $2\frac{3}{8}$  in. deep. Packed 200 per case—20 lbs. per case. Minimum order 200.

Cube: 1/11111111	_	-		
Quantity			ı	Price per 100
200-800				\$48.00
1,000-9,800				44.00
10,000-49,800				40.00
50,000 up				36.00

No. 60. 6 x 10 x 25% in. deep. Packed 125 per case—19 lbs. per case. Minimum order 125.

Quantity				F	,	rice per 1000
125-875 .						
1,000-9,875	5.					. 64.00
10,000-49,8	375					. 58.00
50,000 up						

Prices NET, PREPAID in lots of 150 lbs. or more east of the Rockies. Otherwise, F.O.B. West Chicago; Bayonne, N. J.; Allentown, Pa.; and Toledo, Ohio.

We will be glad to send you samples of any sizes on request.

NOTE: Market-Paks and Half Flats may be combined with Jiffy-Pot orders to make up the minimum weight of 150 lbs. to qualify for PREPAID shipment, if entire order calls for shipment at one time.

Top quality Petunias, grown in No. 42 Market-Paks, are proudly displayed by Mr. Harold Weber of Weber Bros., Oak Park, Mich. "We now grow 100% of our bedding plants in Market-Paks and will never go back to the large flats. Market-Paks are clean, durable, and just the right size. We couldn't do without them." Says Norman Newman of Newman's Flowers, Pittsford, N. Y.

Self-service Market-Pak racks at Thomas Flower Mart, Syosset, Long Island. Art Thomas in insert says: "Switching to Market-Pak and selfservice nearly doubled our volume." Market-Paks are "the key to self-service of bedding plants" say the Carlsons of Janesville, Wis., prominent bedding plant growers. Pictured during our annual Field Day are (left to right) Mr. Carlson, Sr. and sons Russ and Tom.











# The Key To Self Service

Market-Paks have introduced a new era of selling plants in attractive, convenient packages. "Paks" are a compromise between pots and large flats. Selling from pots is expensive, while selling from large flats either over-loads the customer with too many of one variety and color, or consumes selling time, digging and wrapping plants—with all the headaches that involves. Market-Pak users report that they sell more plants with less help in the short, intensive sales period in the spring when help is hard to get.

Market-Paks make possible better display, self-service, elimination of losses. They have an attractive brick-red color and smooth finish . . . better drainage . . . lightweight . . . easy to handle . . . more durable—hard pressed wood pulp product contains no material toxic to plant growth. Market-Paks have become the "workhorse" of bedding plant containers.

## BALL HALF FLAT



Ball Half Flat

The **Ball Half Flat** is made of the same asphalt impregnated wood fiber as the well-known Market-Paks.

Measuring 10 x 12 x 2½ inches, the Ball Half Flat is built with special rib reinforcing in the bottom—adequately drained with eight % inch holes on the sides and bottom, and has the same attractive, smooth finish and brick-red color of Market-Paks.

The Ball Half Flat can accommodate 40 bedding plants with approximately the same space per plant as is found in Market-Pak No. 42 with 12 plants—a little over 3 square inches per plant.

The **Ball Half Flat** will also be found useful for other general greenhouse purposes, such as a seed flat (it is unnecessary to sterilize before using), in carrying small plants, etc.

			PR	ICES		
Quantity						Per 1000
200-400 (	200	for	\$22	(00.2	 	\$110.00
600-4,800					 	100.00
5,000 up					 	90.00

Packed in cases of 200. Shipping weight 50 lbs. per case. Minimum order 200.

Prices NET, PREPAID in lots of 150 lbs. or more east of the Rockies. Otherwise, F.O.B. West Chicago: Bayonne, N. J.; Allentown. Pa.; and Toledo, Ohio.

NOTE: Market-Paks and Half Flats may be combined with Jiffy-Pot orders to make up the minimum weight of 150 lbs. to qualify for PREPAID shipment, provided entire order calls for shipment at one time.

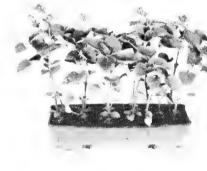


A dozen annuals in Market-Pak No. 42 is the most popular unit of sale throughout the country.

Market-Pak No. 24 is a nice package for 6 plants such as Peppers, which often are sold in less than dozen lots.



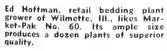
Some growers like Market-Pak No. 30 because plants can be grown in two rows, giving each plant its share of light and air. Salvia shown in this photo.



Market-Pak No. 60 is particularly well suited for Pansies: its slightly larger size gives them plenty of room.



Herbert H. Lee, Lee's Greenhouses, Robertsdale, Ala., showing plants grown from Ball seed in Market-Paks. He says they sell like hot cakes in nearby retail outlets.





Harold Aykens, Memorial Drive Florist, Appleton, Wisconsin, likes to handle his Market-Paks in wire baskets. He sets them on coarse gravel which keeps the bottoms dry and firm.



A guest at the Ball Field Day, Ernest Cuzzocreo, (left) wholesale grower of Orange, Conn., tells Monty Wright of Ball's Container Dept., how essential Market-Paks are to his bedding plant business



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# BIRD'S Vita-Bands and Pots



#### VITA-BANDS

Nutrient-treated Vita-Bands, of a fibre resin construction, enable seedlings and cuttings to make very rapid and luxuriant growth, especially in the early stages. They retain moisture and cut your watering time. Three types of Vita-Bands are offered:

VITA-BAND 10 for growing periods of 8 to 10 weeks.

VITA-BAND D disintegrates in the soil when transplanted—no need to remove band.

VITA-BAND H for extra-long growing periods.

	PRICES PER 1000											
	1½x1½x2½	13/4×13/4×21/2	2x2x21/2	2×2×3	21/2×21/2×3	3×3×3	4×4×3	4x4x4				
Vita-Band 10 0-8,000 10,000-24,000 26,000-48,000 50,000-200,000 Pack per case Wt. per case	\$4.80 4.70 4.60 4.45 2000 33 lbs.	\$5.15 5.00 4.85 4.75 2000 38 lbs.	\$5.40 5.25 5.10 5.00 2000 42 lbs.	\$5.90 5.75 5.60 5.45 2000 51 lbs.	\$6.40 6.25 6.10 5.95 2000 63 lbs.	\$7.10 6.90 6.75 6.55 1000 37 lbs.	\$9.20 9.00 8.80 8.55 1000 50 lbs.	\$11.45 11.25 11.05 10.70 500 33 lbs.				
Vita-Band D 0-8,000 10,000-24,000 26,000-48,000 50,000-200,000 Pack per case Wt. per case	\$4.95 4.85 4.75 4.60 2000 18 lbs.	\$5.30 5.15 5.00 4.90 2000 21 lbs.	\$5.50 5.35 5.20 5.10 2000 23 lbs.	\$6.20 6.05 5.90 5.75 2000 28 lbs.	\$6.45 6.30 6.15 6.00 2000 34 lbs.	\$7.25 7.05 6.85 6.70 2000 40 lbs.	\$9.45 9.25 9.05 8.90 1000 27 lbs.	\$11.80 11.60 11.40 11.05 1000 35 lbs.				
Vita-Band H 0-8,000 10,000-24,000 26,000-48,000 50,000-200,000 Pack per case Wt. per case		\$6.25 6.10 5.95 5.80 1000 26 lbs.	\$6.60 6.45 6.30 6.15 1000 30 lbs.	\$7.75 7.55 7.35 7.20 1000 36 lbs.	\$8.30 8.10 7.90 7.70 1000 40 lbs.	\$8.70 8.50 8.30 8.10 1000 52 lbs.	\$10.70 10.45 10.20 9.95 500 35 lbs.	\$13.10 12.90 12.70 12.30 500 46 lbs.				

SOLD IN CASE LOTS ONLY

Inquire about prices on larger quantities.

#### TOM THUMB FLATS

Designed to hold 1 dozen Vita-Bands. Size No. 1 holds 12 134x2½ in. Bands. Size No. 2 holds 12 2x2½ in. Bands. Size No. 1 Size No. 2

 12 2x2½ in. Bands.
 Size No. 1
 Size No. 2

 PRICE PER 1000
 \$44.70
 \$49.60

 Pack per case
 250
 250

 Wt. per case
 55 lbs.
 62 lbs.

SOLD IN CASE LOTS ONLY

#### PLEASE NOTE!

Bird Vita-Bands, Tom Thumb Flats, Perennial Pots, Vita-Pots and Red Pots are shipped either F.O.B. West Chicago, or East Walpole, Mass. Prices are Net.

### Wood Pot Labels

#### Unprinted

Our labels are made from the finest quality selected clear White Pine and are guaranteed to meet all the requirements of the Nursery and Florist Industries.



	FOI LABELS	
	Plain per 1000	Painted* per 1000
	NET, PREPAID	NET, PREPAID
in.	\$3.50	\$4.20
in.	3.75	4.50
in.	4.10	5.00
in.	5.90	7.20
in.	7.00	8.50
in.	8.40	10.00
	in. in. in.	Plain per 1000  NET, PREPAID  in\$3.50  in3.75  in4.10  in5.90  in7.00

POT LARFIS

#### **GARDEN STAKES**

			Plain	Painted*
Size		p	er 1000	per 1000
	in.		8.65	\$10.00
10x7/8	in.	 	9.85	11.25
12x11/8				20.00
	-	NET.	PREPAID	

#### COPPER WIRED TREE LABELS

	. ,,	
	Plain	Painted*
Size	per 1000	per 1000
$3\frac{1}{2}x\frac{5}{8}$ in.	\$4.10	\$5.00
	NET. PREPAID	

#### PLEASE NOTE

ALL PRICES ARE PREPAID-MINIMUM ORDER-1000

Except 12x11/8 in, Garden Stakes on which the minimum order is 500.

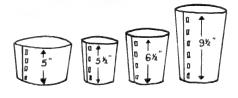
QUANTITY DISCOUNTS: 2000 to 4000, 2%; 5000 to 9000, 3%; 10,000

\*PAINTED LABELS are lightly coated with a thin paint preservative in accordance with government standards, to insure longer life and greater legibility.

#### WOOD LABELS, Printed

We offer Printed, 4-inch labels in convenient cartons of 100 of all Sweet Sixteen Varieties plus other popular varieties. See page 2.

#### PERENNIAL POTS



A hetter perennial pot for Roses, vines, shrubs and other perennials. Made of a tough material with hard, smooth coating inside and out. Solid stapled bottom with openings for drainage.

5-inch high pot for use as a Mum pan.

 $5\frac{1}{2}$ -inch high pot designed for small perennials and bulbs.

6½-inch high pot designed for larger perennials, junior Roses and vines.

9½-inch high pot designed for larger Roses, larger perennials such as Peonies, large vines and shrubs.

NOTE	: Order	by heig	;ht—not top di	ameter.
	Top	Wt. per	Per Case	Per
Height	Dia.	1000	of 200	
5 in		325 lbs.	\$13.70	\$65.00
51/2 in	. 5 in.		10.00	47.50
61/2 in			12.30	58.50
	7 in.		14.50	69.00

Minimum order, case of 200 of one size, 3 cases at 1000 price. Case lots only.

## VITA-POTS and RED POTS



VITA-POTS: Sturdy, resinous pots, nutrienttreated. Grow and ship in same pot. Widely used for small perennials and ornamentals of all kinds.

RED POTS: For shipping only, Protects root hall from breakage—light weight

Dull	71 (	mi broa	age-Hgnt	weight.			
		V	TA-POTS	RED POTS			
			Per 1000		Per 1000		
2	in.	20 lbs.	\$14.60	10 lbs.	\$ 9.00		
21/4	in.	25 lbs.	14.95	12 lbs.	9.00		
21/2	in.	31 lbs.	15.50	16 lbs.	9.10		
3	in.	43 lbs.	17.40	22 lbs.	9.60		
31/2	in.			32 lbs.	12.80		
4	in.	76 lbs.	25.70	42 lbs.	15.50		
5	in.	120 lbs.	33.40	66 lbs.	19.00		

PACKING: 4- and 5-inch, 500 per case. All others 1000 per case.

## For JIFFY-POTS

See pages 110-112.



# BALL Better Plant Bands Guguelle

for Bedding Plants . . Chrysanthemums . . Perennials Nursery Stock . . Carnations . . Vegetables

#### Sometimes it's better to use Bands because:

Plant Bands are less expensive than pots . . . . firm, clean and disease-free . . . . hold more soil than a pot of equal diameter . . . . fit close -no waste space . . . lighter to handle and store . . . . need less water . . . . keep soil ball intact . . . . rapidly filled—faster than small pots one at a time . . . . pack tightly and compactly for small plant shipping . . . . produce high quality plants as proven through years of use by growers everywhere.

### It's always better to use Ball Bands because:

They are made of sturdy, long-fibered, finegrained basswood and fastened with rust-resistant staples . . . . treated before shipping to prevent mildew and fungous growths . . . dried and kiln-dried to eliminate excess moisture, making them lighter in weight for shipping (as much as 25% to 50% lighter than others) . . . . packed in two valuable greenhouse flats at no extra cost . . . a "best buy"—tops in quality and low in price on the basis of a final delivered

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veniently in Veneer Plant Bands. A PlanTray of twelve banded plants may be sold as a unit, or the individual plants taken out—no root disturbance in either case.

Prices Net, F.O.I	<ol><li>West Chica</li></ol>	ago, Ill.	1	Per 1000	in quantit	ies as show	n helow
	Shipping	Weight			10.000-	25.000-	50,000
Size	Units of	per 1000	9,	,000	24,000	49,000	Up
13/4×13/4×2	2,000	17 lbs.		5.20	\$5.80	\$5.40	\$5.20
$1\frac{3}{4}\times1\frac{3}{4}\times2\frac{1}{2}$	2,000	18 lbs.		6.35	5.95	5.55	5.30
2 x2 x2	2,000	19 lbs.	6	5.35	5.95	5.55	5.30
2 x2 x2½	2,000	20 lbs.		5.45	6.05	5.65	5.40
2 x2 x3	2,000	21 lbs.		5.95	6.50	6.10	5.80
$2\frac{1}{2} \times 2\frac{1}{2} \times 2\frac{1}{2}$	2,000	22 lbs.		5.95	6.50	6.10	5.80
$2\frac{1}{2} \times 2\frac{1}{2} \times 3$	2,000	23 lbs.		7.45	6.95	6.50	6.20
3 x3 x3	1,000	33 lbs.		7.85	7.35	6.85	6.60
3 x3 x4	1,000	45 lbs.	8	3.20	7.70	7.20	6.80
4 x4 x3	1,000	45 lbs.	8	3.20	7.70	7.20	6.80
4 x4 x4	1,000	48 lbs.		9.20	8.70	8.10	7.80
****							

NOTE: Plant Band sizes 1\% x1\% x2\1/2 and 2x2x2\1/2 also stocked during the fall and early winter in Dallas, Texas, and shipped f.o.b. Dallas.

## BALL Veneer "PlanTrays"

PlanTrays are designed to hold the various sizes of plant bands, or may be used without bands, as a small pack for plants. Several sizes are well suited for handling Jiffy-Potted plants. Ball PlanTrays are manufactured in the same careful manner as Ball Veneer Plant Bands. They are shipped knocked down but with one edge of the bottom stitched to a side so that they may be "set up" in a jiffy. Thoroughly air-dried and kiln-dried, they are lighter in shipping weight. The X-type holds 12 bands. The SX-type holds 25 bands.

		Pri	.ces per10	00 as shov	n below
All Prices, Net, F.O.B. our warehouse in West Chicago, Ill.	Shipping	Weight	0-	1000-	2500-
Size Dimensions		per 1000	875	2375	Up
No. 1-X (5\%x7\%x2\%2—holds 12 1\%x2\%2 bands)	125	200 lbs.	\$60.00	\$56.55	\$53.00
No. 2-X (6½x8½x2½—holds 12 2x2½ bands)	125	240 lbs.	65.40	61.60	57.75
No. 3-X $(8\frac{1}{8}\times10\frac{5}{8}\times2\frac{1}{2}$ —holds $12\ 2\frac{1}{2}\times2\frac{1}{2}$ bands)		288 lbs.	72.50	68.25	63.95
No. 4-X (95/8 x12½ x2½—holds 12 3x3 bands)	125	320 lbs.	79.50	74.90	70.00
No. 1-SX (9\%x9\%x2\to holds 25 1\%x2 bands)	125	288 lbs.	72.50	68.25	63.95
No. 2-SX (10½x10½x2—holds 25 2x2 bands)	125	320 lbs.	79.50	74.90	70.00
No. 3-SX (13x13x2½—holds 25 2½x3 bands)	125	400 lbs.	99.50	95.50	91.25



Delphinium-Veneer Plant Bands are especially nice for perennials



A well grown crop of Carnations in Veneer Plant Bands.

#### PLANTRAYS HOLD JIFFY-POTS



PlanTrays make a convenient carrier for Jiffy-Pots, both when handling the plants during the growing period and when transporting them. Below you will find listed various sizes of Plan-Travs that are suitable for holding Jiffy-Potted Plants:

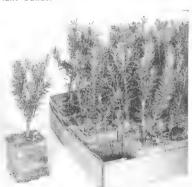
No. 2-X holds 12 21/4-inch or 6 3-inch.

No. 3-X holds 12 3-inch. No. 2-SX holds 25 21/4 or 16 3-inch.

No. 3-SX holds 36 21/4-inch or 25. 3-inch.

For Jiffy-Pots see pages 108-

Right: D. Hill Nursery, Dundee, III., pioneered the use of  $2\frac{1}{2}x2\frac{1}{2}x3$  inch bands in No. 3-SX PlanTrays for SX PlanTrays for growing evergreen cuttings in frames before lining out. Hills treat the bands and trays with a wood preservative so that they will stand up for two years. We can give you the formula for this.





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## JIFFY-POTS

#### THE REVOLUTIONARY PLANT GROWING CONTAINER

Jiffy-Pots, in the few years since they were first introduced, have brought many changes in the methods of growing flower, vegetable and nursery crops all over the world. In many instances they have replaced old-style pots, in others they have afforded an early start to plants that normally would be directly planted to bench, bed, field or garden.

Composed of 75% long-fibered peat and 25% wood fiber, Jiffy-Pots are uniformly impregnated with sufficient nutrients to give young plants a good start. Roots grow right through the walls, permitting repotting into larger pots or benching without removing the Jiffy-Pots.

#### **CUT-FLOWER CROPS**

CARNATIONS: Carnation growers throughout the country are using Jiffy-Pots extensively for potting their cuttings. Selection against disease and poor plants is facilitated . . . . diseased plants are easily rogued out and spread to other plants is lessened. 25% more plants can be grown in a given area using Jiffy-Pots in the nursery bed. Less root injury to plants—easier to handle in transplanting.

3-inch Shorties are convenient to use-their shallow depth fits inside the usual flats-flats of Jiffies can be prepared ahead of time and stacked until ready to plant.

CHRYSANTHEMUMS: Cuttings can be potted in Jiffy-Pots and grown pot-to-pot for three or four weeks in much less space than required when benched. Then the Jiffy-Potted Mums are benched, pot and all, with the usual spacing. The use of Jiffy-Pots in year-round Mum programs can enable the grower to decrease production when the demand is off and increase production when the demand is the greatest. For example, increased production for Christmas and Easter, with a decrease in production during the summer. Write our Mum Planning Service for details. Garden varieties of Mums are being grown nicely in 3-inch Jiffy-Pots.

SNAPS: The year-round Snap grower can get steady mid-winter production by using 21/4 inch Jiffy-Pots for 6 to 8 weeks in his fall sowings. This means 3 full crops a year at an even rate of production. Using 21/4-inch Jiffy-Pots 100% of the time increases production at all seasons, to as much as 5 complete crops a year by actual

ASTERS: Like Snaps above, direct benched Aster seedlings take a long time to flower, especially the early crops. Here's a method to save valuable bench time yet retain unchecked growth. An example of using Jiffies to dovetail Asters into a mixed rotation: follow normal season November Mums with Ball Asters sown September 10, potted in 21/4-inch Jiffy-Pots October 1, benched November 25. These will flower in March, to clear in time for bedding plants or an extra Snap or Mum crop.



POINSETTIAS: Jiffy-Pots and Poinsettias are a "natural" combination. Advantages: Protection from breaking the root ball when panning. Grading plants by root development as well as top development for greater uniformity-vigor of the root system shows on the outside of the pot wall. Ideal environment for growth of this touchy crop-adequate water and fertilizer help keep down plant height according to University tests and customer experience.

With Jiffy-Pots, Poinsettia cutting production is shifting to later in the season, first cuttings being taken August 10 or later. Only two or three flushes of cuttings are taken. Stock plants are pinched during June and July to produce more breaks. Total cutting production is at least equal to old early-propagation system. Stock can be lighted from September 25 to October 10, late batch of cuttings taken October 10 for direct rooting in 3-inch Jiffy-Pots for finishing. (Drop the Jiffy into a plastic pot for selling).

GERANIUMS: Growth is so rapid that unrooted cuttings stuck in Jiffy-Pots are ready to ship in 3 weeks from early and midseason propagations. Cuttings taken from plants during the winter months are ready for shipping in 5 weeks.

For Notes on Other Crops, See Page 110.



This Taxus cuspidata in a 3-inch Jiffy can be held until the weather is ideal for lining out.

Petunias are fast growing—requiring lots of moisture and feed. Just the job for a Jiffy!

#### **CARNATIONS**

John Kyne (left) and Tom Kityama of Kityama Bros., one of the largest Carnation growers in the Bay area (over 250,000 plants). Their plans next year call for Jiffy-Potting their entire crop.

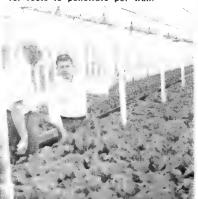
James A. Green of Shrewsbury, Mass. (left), James A. Green or Shrewsbury, Mass. (left), uses Jiffy-Pots to get nearly 4 crops per year instead of the normal 3 in his year-round Mum program. He starts them all in 2½-in. Jiffy-Pots in flats placed on racks at the side of his houses. Also Carl Ball and Jim Tufts.

#### CHRYSANTHEMUMS

Bill Gunesch (right) of Park Floral Co., Denver, rooted 60,000 cuttings in 21/4-in. Jiffy-Pots in Sept., '57, with losses less than 1%. Rooting is done under mist, 6 seconds every 3 minutes for 10 days, then easing off. Bill reports 12 days to callous, 6 days to root, 6 days for roots to penetrate pot wall.

#### POINSETTIAS

Al Campbell, Jr. (left) and Al Campbell, Sr. of Strafford, Pa. Campbell's are particularly impressed with the labor saved in panning and also the unchecked. uninterrupted quality growth which they get with Jiffies.







# jippot jippot jippot jippot jippot

## NOW! 8 different sizes in Three different shapes

### ROUND-

 $1\frac{1}{2}$  in.,  $2\frac{1}{4}$  in. and 3 in. In standard depths.

### SOUARE -

2½ in., 3 in. and 4 in. Fit snugly in bench, flat or shipping

#### SHORTY -

3 in. and  $3\frac{1}{2}$  in. Round pots of shallow depth. Broad base gives greater stability—easier to space.

#### ROUND STANDARDS

No. 115.  $1\frac{1}{2}$  in. Round,  $1\frac{3}{4}$  in. deep. Used for small plants that need to be grown for a short period in limited space, such as Snap seedlings or perennials for field plant-3000 to 18,000 (3000, \$17.70) .....\$5.90 21,000 to 72,000 ..... 5.40 mum order 3000.

No. 122. 21/4 in. Round, 21/4 in. deep. Most widely used size for florist and nursery crops. Ideal for Poinsettias, Geraniums, Fo-Per 1000 liage Plants, etc. 3000 to 18,000 (3000, \$21.75) .....\$7.25 21,000 to 72,000 . . . . . . . . . . . . 6.75 75,000 up . . . . . . Sold in cases of 3000, 35 lbs. per case. Minimum order 3000.

No. 130. 3 in. Round, 3 in. deep. For plants that make large root systems, require longer growing time or more space.

	Per 1000
1500 to 9000 (1500, \$19.88)	\$13.25
10,500 to 49,500	12.25
51,000 up	11.00
Sold in cases of 1500, 35 lbs. per	
mum order 1500.	

#### **SQUARES**

No. 222.  $2\frac{1}{4}$  in. Square.  $2\frac{1}{4}$  in. deep. Especially convenient for shippers of small plants like Geraniums. Fits into trays or cartons snugly and securely. Per 1000 2500-17,500 (2500, \$18.75) Sold in cases of 2500, 35 lbs, per case, Minimum order 2500.

No. 230. 3 in. Square. 3 in. deep. Available January 1, 1959.

Nice for bench crops—no waste space. Per 1000 

No. 240. 4 in. Square.  $4\frac{1}{2}$  in. deep. Available January 1, 1959.

Largest of the Jiffy-Pots.

mum order 1000.

Largest of the Jiny Lots.	Per 1000
500-4500 (500, \$13.75)	
5000-19,500	
20,000 up	23.50
Sold in cases of 500. 35 lbs. Minimum order 500.	per case.

PRICES PREPAID on 150 lbs. or More

Prices NET. PREPAID in lots of 150 lbs. or more anywhere in the continental United States excluding Alaska. Otherwise, f.o.b. West Chicago; Bayonne, N. J.; Allentown, Pa.; Toledo, Ohio; Houston, Tex.; Los Angeles, Calif.; San Francisco, Calif.; Portland, Ore.

NOTE: Jiffy-Pots may be combined with Market-Pak orders to make up the minimum weight of 150 lbs. to qualify for PREPAID shipment, provided entire order calls for shipment at one time.

Joe (left) and Bob Braun of Hightstown, N. J. find Jiffies result in lower costs, better plants, quicker turnover, and more plants per sq. ft. in producing Geraniums. Also Frank Drab of Ball's.

Of his Geranium operations, Dana Perkins of Walker and Lubin Ghses., Lapeer, Mich-igan says, "We're rooting Geraniums in 21/4-in. Jiffy-Pots throughout the season and losses are negligible. We have less rot than in our previous system.



FOR SALE, Cheap: 20,000 2-in. and  $2\frac{1}{2}$ in. clay pots. "Who needs them when you can buy Jiffy-Pots" says Jerry Neudoerffer of the Brampton Nursery, Brampton, Ontario, shown here with a beautiful crop of Asters grown in 21/4-in. Jiffies.







No. 330. 3 in. Shorty.  $2\frac{1}{2}$  in. deep.

Its broad base gives greater stability. Ideal for bedding plants. Well suited for plants that are best when benched shallow, e.g. Carna-

tions.	Per 1000
1500-9000 (1500, \$19.50)	\$13.00
10,500-49,500	12.00
51,000 up	
Sold in cases of 1500, 33 lbs, per c	
mum order 1500.	

No. 335. 3 1/2 in. Shorty. 3 in. deep.

mum order 1000.

Well adapted for greenhouse Tomatoes or bulbs such as Caladiums, Tuberous Begonias, Per 1000 7000-29,000 17.00 30,000 up 15.25 Sold in cases of 1000, 35 lbs. per case. Mini-







#### NURSERY STOCK

"After several months of planting out Jiffy-Potted liners our crew's production declined markedly when given clay-potted liners to set out. It meant extra work and handling." Wm. Flemer III (rt), Princeton Nurseries, Princeton, N. J.



#### **FOLIAGE PLANTS**

Lawrence Novak of Harville Plant Farm, Willis, Texas, takes top cuttings of Dieffenbachia and roots them in peat in 3-in. Jiffy-Pots. These root in 3 weeks and are then plunged into 6-in. pots. Of 300 planted only 2 were lost.



#### BEDDING PLANTS

Luke Sorzano, Holiday Gardens, Rutledge, Pauses over 100,000 21/4-in. J. P.'s on his Petunia crop. He puts 36 in a 3 SX PlanTray, held above by Charlie Crownover of Ball's sales force. He finds this combination space-saving and easy for his women workers to handle. and easy for his women workers to hand Jiffies bring his crop in two weeks earlier.



#### PERENNIALS

Dick Boonstra (right) of Way-side Gardens, Mentor, Ohio, says "The root system of these Veronicas was bigger and more impressive than we had gotten from substantially earlier pro-pagations with clay pots.

#### **NURSERY STOCK:**

Propagate direct in 21/4- or 3-inch Jiffy-Pots and eliminate transplanting shock on Pyracantha, Cotoneaster, Hawthorn and Franklinia. Direct propagation from seed or cuttings. Saves labor too by decreasing the frequency of watering. Less watering means less shock from cold water, thus fewer "growth checks" and fewer chances of disease from excess

No need to delay field planting! Jiffy-Pots keep them growing until the weather conditions are "perfect" for lining out. Just a sample of what has been grown in 21/4- and 3-inch Jiffies: Hollies, Hardy Azaleas, Taxus, Camellias, Magnolias, Viburnums, Boxwoods, Andromedas, Rhododendrons and several ground covers.

#### **FOLIAGE PLANTS:**

A Jiffy-Pot, with its reservoir of moisture and fertilizer, is a natural environment for tropical foliage plants. Northern growers are reducing losses of rooted cuttings by potting into Jiffies as soon as cuttings arrive. Shippers in the South get better "take", rooting and shipping in 21/4, 3and even 1½-inch Jiffy-Pots.

#### PERENNIALS:

The selective gardener is finding perennials offer something new and different. They can be Jiffy-Potted late in the summer and carried over in frames. However, more and more growers are finding they can sow perennials in mid-winter, Jiffy-Pot them and have heavy, salable plants for spring sales.

#### **VEGETABLES:**

Jiffy-Pots give earlier, steadier, bigger yields of greenhouse, field and canning Tomatoes, Cucumbers, Melons, Peppers, Eggplants, and many more vegetables. They mean better control too-plants don't get away, can be held back if the season is delayed. With Jiffies the crop is increased and evened out-all the feeding roots are saved, ready to go to work an hour after plants are in the ground.

#### **BEDDING PLANTS:**

Jiffy-Pots offer the ultimate in home gardener satisfaction. Plant growth is unchecked in transplanting as the roots are not disturbed. Plants may be held for days before transplanting if necessary without plant injury. Faster, heavier growth allows the retail customer to have his plants in bloom, or his vegetables ripe, weeks before his neighbors. Big problem has been damage to the Jiffy-Potted plants due to excessive customer handling. There is a major improvement this year with the Jiffy-Tray (see below) and the new square Jiffy-Pots. This combination eliminates customer handling of individual plants. Good plan: grow Jiffy-Potted plants in PlanTray, flat or bench, then grade plants for uniformity before packing in Jiffy-Trays. Don't overlook Jiffy-Pots for growing plants for combination pots-saves labor and gives customer something he can easily pull apart later for planting in his garden.



Typical West Chicago gardener beamng with pride in his Tomato crop grown from 3-inch Jiffy-Potted plant purchased at a nearby garden center.

## JIFFY-TRAY

Makes Handy Package for Retail Sales of Jiffy-Potted Plants



At last we have found a way that you can offer Jiffy-Potted plants for retail sale without their being damaged by your customers' handling and rehandling. It is a plastic basket we have called a Jiffy-Tray. It holds six 21/4-inch Square Jiffies—just tight enough for a firm fit, yet not too tight for easy removal. In this way you have a convenient unit of sale and yet the customer does not handle individual plants.

Although attractive in themselves, Jiffy-Trays' open construction makes them inconspicuous—an important point, for the pots can be easily seen and root growth noted.

Bedding plants in Jiffy-Pots, six to a Jiffy-Tray, should find a ready sale in every type of retail outlet. It's the perfect combination of high quality plants and economical mass handling. JIFFY-TRAY PRICES



Per 1000
1000 to 4000 \$31.00
5000 to 9000 28.00
10,000 up 26.00
Prices net. PREPAID east of the
Rockies. PREPAID west of the
Rockies at \$2.00 per 1000 added to
above prices. Packed 1000 per case.

MINIMUM ORDER 1000. Shipping weight per case, 33 lbs.

## "JIFFIES" For Retail Sales

Add to Your Spring Profits with PACKAGED 21/4- and 3-inch JIFFY-POTS



for 150 pounds or more.

Sell JIFFY-POTS to your gardening customers for their annual and perennial flowers, vegetables, and cuttings of Mums, Geraniums, shrubs, and house plants. JIFFY-POTS have been given nationwide publicity by garden editors and writers. Your customers will ask for them-be ready with plenty of these attractive 3-color packages.



	Pot	Pots Per	Retail Price	Pkgs. Per	Shipping	Price Per
Cat. No.	Size	Pkg.	Per Pkg.	Case	Weight	Case
R225JP12	$2\frac{1}{4}$ in.	12	\$ .49	48	12 pounds	\$14.12
R225JP24	$2\frac{1}{4}$ in.	24	.89	24	10 pounds	12.82
R300JP6	3 in.	6	.59	36	14 pounds	12.74
R300JP12	3 in.	12	.89	24	18 pounds	12.82
B225JP50	$2\frac{1}{4}$ in.	50	1.39	60	45 pounds	50.40
B225JP100	$2\frac{1}{4}$ in.	100	2.19	30	45 pounds	39.60
B300JP50	3 in.	50	1.95	30	45 pounds	35.10
B300JP100	3 in.	100	3.39	15	45 pounds	30.45
MINIMUM	ORDER: one	case. F.	O.B. West	Chicago.	Freight prepaid	on orders

### for Year-Round Plastic Houses-

## DuPont Weatherable "MYLAR"

Polyester Film - Type W

LONG LASTING — ECONOMICAL — STRONG

## We now have a practical, long lasting plastic film for greenhouse use.

A test greenhouse constructed by the Du Pont Co. at Wilmington, Delaware, has stood up for three winters and two summers on a greenhouse roof. As the greenhouse is still standing, the actual ultimate life of Weatherable "Mylar\*" Type W will not be determined until these present tests are completed. It is very likely, however, that at least the side walls and gable ends should last several years longer. The portions of our own test greenhouse (see photo above) devoted to Weatherable "Mylar" have been up for over one year and are in excellent condition.

#### The strongest plastic film known today.

Weatherable "Mylar" Type W is the strongest plastic film known today, having 9 times the strength of Polyethylene. It has a tensile strength in excess of 20,000 lbs. per sq. in., approximately one-third the strength of machine steel.

Will not shrink or stretch—even under widely varying temperatures—will withstand 60 to 200°F. without injury.

**Highly resistant to breakage**—from impact by hail, stones, etc. Has withstood winds up to 70 m.p.h. without tearing.



Our plastic test house at West Chicago. Most all plastics offered for greenhouse use have been tried here under actual commercial conditions. It is on the basis of this actual experience that we feel Weatherable "Mylar" will be used extensively in greenhouse building.

Clear as Glass—will transmit essentially the same amount and quality of light as greenhouse glass. Will not attract dust. Easy to install—having more body, "Mylar" is much easier to handle during application—resists tearing from the edges. It's lightweight and flexible without being flimsy and difficult to secure.

## You can get several times more greenhouse space than with glass for the same cost.

This is a key figure for businesses with a limited capital. For reasonably large scale installations, 20 to 30,000 sq. ft. or more, our cost figures total just under **55c** per sq. ft. for the structure.

This is a well built 2x4 house (posts set in concrete), with 2x2-in. bars spaced 20 ins. This does not include vents, so add 9c per sq. ft. for fans. Total cost about 64c. This includes all labor and material, realistically figured.

This is but a fraction of the cost of a glass structure.

#### WEATHERABLE MYLAR-TYPE W. 5 MIL THICKNESS

3% discount for cash with order; otherwise net. F.O.B. West Chicago.

The Bartlett structure of low cost, lifetime aluminum. Polyethylene cover clamps into place. Excellent for spring plant production, and as a sales area—also for fall crops. Write us for particulars and prices.

	100 f	t. Rolls	1000 ft. Rolls			
	Wt.	Sq. Ft.		Sq. Ft.		
Width	Per Roll	Per Roll	Per Roll	Per Roll		
36 in.	13 lbs.	300	112 lbs.	3000		
42 in.	15 lbs.	350	130 lbs.	3500		
48 in.	17 lbs.	400	150 lbs.	4000		

**ROLL SPECIFICATIONS** 

NOTE: Rolls of different lengths and widths may be combined to determine total number of sq. ft. for price. MINIMUM ORDER 1 roll. Send for free sample swatches of Weatherable "Mylar", together with plans and specifications for building a plastic greenhouse.

PRICES PER S	Q. FT.	
	In 100 ft. Rolls	In 1000 ft. Rolls
300-2,999 sq. ft	.17½c	
3,000-23,999 sq. ft	16½c	16c
24 000 sq. ft. up	166	151/

\*Du Pont's registered trademark for its polyester film.



## for Seasonal Plastic Houses-POLYETHYLENE

For creating low cost temporary greenhouse space—particularly in the spring—no plastic is more practical or more inexpensive than Polyethylene. It cannot stand the high ultra violet rays of the summer sun, however, and quickly goes to pieces in early June in most climates. Available in wide sheets, it can be quickly and easily applied to a greenhouse

structure—especially to the Bartlett house pictured above.

When used to insulate the inside of a glass house or Mylar house, it has been known to reduce heating bills by 30%. Also proven to be very suitable for use on cold frames, greenhouse partitions, and for chemical fumigation covers. Not suitable as a steam sterilization cover, for which we recommend vinyl Fumicovers (page 112).

#### POLYETHYLENE PRICES

					or more	1					J of more
			Shipping		Rolls				Shipping		Rolls
Gauge	Width	Length	Weight	Per Roll	Per Roll	Gauge	Width	Length	Weight	 er Roll	Per Roll
.002	9	ft. x 100 ft.	12 lbs.		\$ 6.65	.004	40	ft. x 100 ft.	83 lbs.	 59.65	\$55.70
.004		ft. x 100 ft.		4.50	4.20	.006	3	ft. x 100 ft.	11 lbs.	 6.75	6.25
.004		ft. x 100 ft.		8.95	8.40	.006	6	ft. x 100 ft.	21 lbs.	 13.45	12.55
.004	-	ft. x 100 ft.			11.15	.006	101/2	ft. x 100 ft.	34 lbs.	 23.50	21.90
.004		ft. x 100 ft.			14.65	.006	12	ft. x 100 ft.	39 lbs.	 26.85	25.05
.004		ft. x 100 ft.		17.90	16.70	.006	14	ft. x 100 ft.	45 lbs.	 31.30	29.20
.004		ft. x 100 ft.	31 lbs.	20.90	19.50	.006	161/2	ft. x 100 ft.	53 lbs.	 36.90	34.45
.004		ft. x 100 ft.	36 lbs.		23.00	.006	20	ft. x 100 ft.	63 lbs.	 14.75	41.75
.004		ft. x 100 ft.			27.85	.006	24	ft. x 100 ft.	74 lbs.	 53.65	50.10
.004		ft. x 100 ft.		35.80	33.40	.006	28	ft. x 100 ft.	86 lbs.	 52.60	58.45
.004		ft. x 100 ft.		41.80	39.00	.006	32	ft. x 100 ft.	98 lbs.	 70.55	66.80
.004	32	ft. x 100 ft.		47.70		006	40	ft x 100 ft.	122 lbs.	 89.45	83.50
	0.4	11. A 100 II.	or ms.			1000	2.0	200 200	-		

PRICES NET, f.o.b. West Chicago. | SAMPLES AVAILABLE UPON REQUEST

Gro. g. Ball

## Florist Supplies

#### PLASTIC FUMI-COVERS

For Steam Sterilizing



#### Black or Clear 3 Gauge Vinyl

3 gauge vinyl plastic is light weight, tough, and pliable. Temperature range 10° to 280°F. The most widely used sheeting in the agricultural industry because of its durability, weight, and cost. Net, F.O.B. Chicago, Ill.

										100 ft.	150 ft.
Wie	dth									Length	Length
$6\frac{1}{2}$	ft.	,								\$20.80	\$31.20
8	ft.		, ,			٠			٠	25.60	38.40
10	ft.						۰			32.00	48.00
12	ft.									38.40	57.60

### Chlorophyll Green 8 Gauge Vinyl (A heavier grade)

Chlorophyll green sheeting is made only of extra heavy duty 8 gauge vinyl plastic. Temperature range 10°F to 280°F. Chlorophyll green light transmission is less than 1%. Life expectancy of 8 gauge vinyl is 3 times that of 3 gauge vinyl. Net, F.O.B. Chicago, Ill.

	100 ft.	150 ft.		100 ft.	150 ft.
Width		Length	Width	Length	Length
6½ ft.	\$38.35	\$57.55	10 ft	\$59.45	\$ 89.20
8 ft	47.20	70.80	12 ft	69.60	104.40



Watering is one of your most timeconsuming jobs—why not use a HOSEBOYE? From our own experience, we find it does a better

perience, we find it does a better job of watering, and at a small fraction of the hand labor costs.

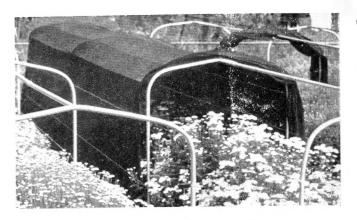
HOSEBOYE is an automatic, economical method of watering. You need

\$395.00. F.O.B. Cincinnati, Ohio.

turn it on—and go about your other jobs.

HOSEBOYE—Complete with 150 ft. ¾-in. inside diameter plastic hose, sled and 4 special Veejet Nozzles for Universal Application Assembly B;

only place this electric powered hose reel and sprinkler in position-



#### **BLACK SHADE CLOTH**

Price per Sq. Yard Sewed Unsewed

BLACK CLOTH (For Day Length Control on Mums, etc.)

On orders for less than minimum of 100 sq. yds. sewed or 300 sq. yds. unsewed, a charge of \$2.00 is added.

Sold in 3 ft. widths or multiples of 3 ft. only F.O.B. New Jersey.

#### STEAM-FLO SOIL STERILIZER

Here's a machine that will sterilize a bed 5x50 ft. in 2 hours—maintaining from 8 to 10 lbs. pressure, burning from 4 to  $4\frac{1}{2}$  gallons of No. 1 fuel oil per hour AND you do not have to handle the soil.

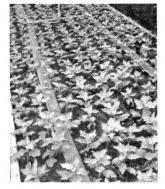
Completely equipped including automatic water feed and low water cut off. Not including tires (uses 16 in. rim tires). Price: \$685.00. 25 ft. Steam Hose 1¼ in. with two female connectors. Price: \$40.00.

Aluminum tubing 1.9 in. outside diameter, flanged and drilled in 10 ft. lengths. Price: 42c per ft.

Weston Thermometer, for soil heat testing, 2 in. head—8 in. stem. Price: \$7.50 each. F.O.B. Cincinnati, Ohio.



The Rough Bros. Steam generator—about 15 HP, capable of steaming 250 sq. ft. of bench area in 2-3 hours.



Typical arrangement of Gro-Hose. Four-way header (top of photo) is placed in center of the bench and two rows of Gro-Hose run to each end. Soil is kept uniformly moist—does not become compacted.

#### GRO-HOSE AUTOMATIC BENCH WATERER

#### Does a Better Job Than Hand Watering!

Scientifically designed black Polyethylene hose. 2¼ in. wide, has FOUR holes spaced every 8 in. apart, waters the full length and breadth of your benches—AUTOMATICALLY.

Ideal for chemical fertilization. Installed in a few minutes and requires no attendance. Saves many man hours of labor. Operates on 1 lb. pressure. Keeps foliage dry.

Each row of "Gro-Hose" gently and thoroughly waters a two-foot strip. Two rows (as shown) are needed for the average bench. For benches wider than four feet, three rows are recommended.

Headers made of copper tubing and brass couplings are

used to connect "Gro-Hose" to your present water supply. Gro-Hose is most effective when used in lengths of not more than 75 ft, in each direction. For example: we suggest that for a 100-ft, bench four 50-ft, lengths and a four way header (in the center of the bench) be used and not two 100-ft, lengths and a two way header (at the end of the bench). For detailed information, please send for circular.

#### PRICES:

HOSE		HEADERS				
1-1000 ft\$0	.09½ ft.	Two-way, each	\$3.00			
1001-5000 ft.	.08 1/2 ft.	Four-way, eac	h 3.75			
Over 5000 ft.	.071/2 ft.	Six-way, each	5.00			

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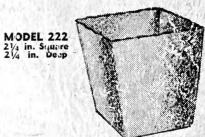
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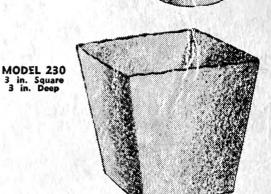
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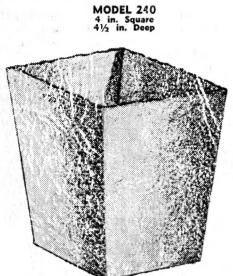
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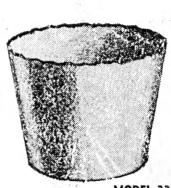


MODEL 122 21/4 in. Round 21/4 in. Deep



MODEL 330 3 in. Shorty 2½ in. Doep





MODEL 335 31/2 in. Shorty 3 in. Deep



MODEL 130 3 in. Round 3 in. Deep